SPECIALIZED OIL JOURNALS
GULF PUBLISHING COMPANY
PRODUCING REFINING MARKETING

Volume 44, Number 9 *February 18, 1927*

The OIL WEEKLY

Edited Weekly at Houston, Texas SPENCER W. ROBINSON, *Editor*

News—Features—Editorials

EDITORIAL COMMENT 48
PETROLEUM LEADERS PREDICT YEAR OF PROSPERITY 49
RESEARCH PROGRAM NEED STRESSED AT ENGINEERS MEETING 55
By Spencer W. Robinson
PANHANDLE SET HIGH PRODUCTION STRIDE LAST YEAR 68
By H. H. King
WEST TEXAS THOUGHT TO BE SOURCE OF MUCH FUTURE OIL 72
By H. H. King
HE HELPED TO DRILL THE FIRST OIL WELL 83
By Harry Botsford
WHAT OF THE YEAR 1927? 139
By Arthur Knapp
LETTERS OF PAUL PEEBLES, P. S. G. 216
"SQUEAKS" FROM THE BULL WHEEL 218

Statistics—Economics—Markets

FLOOD OF PRODUCTION WEAKENS CRUDE MARKET 47
By Kent Ridley
CHECK OF FIGURES SHOWS OUTPUT GAIN SLIGHT 51
By A. R. McTee
OUTPUT GAIN REVEALS ADVANCES IN PRODUCTION TECHNIQUE 53
By Joseph E. Pogue
VENEZUELA BECOMES FOURTH LARGEST PRODUCING COUNTRY 56
DIGEST OF A. I. M. E. PRODUCTION SYMPOSIUM 59
TEXAS WELL AVERAGE RAISED DURING LAST HALF 1926 65
By Wallace Davis and H. H. King
DAILY AVERAGE PRODUCTION FOR ALL U. S. FIELDS 74
FIELD STATISTICS COVERING 1926 (INDEXED) 89
CRUDE OIL PRICE QUOTATIONS FOR ALL U. S. FIELDS 162
IMPORTS AND RECEIPTS OF CALIFORNIA OIL AT ATLANTIC PORTS 164

Field Development—Explorations

CLIMBING PRODUCTION AT SEMINOLE PRESAGES SHUT-DOWN 58
By Roye Munsell
PROSPECTS INDICATE NEW EXTENSION FOR HUNTINGTON BEACH 65
By Wm. V. Gross
RECONDITIONING WELLS INCREASES PANHANDLE PRODUCTION 66
THREE WEST TEXAS COUNTIES HAVE BIG FLUSH WELLS 67
NEW SABINE PARISH PRODUCER HOLDS FLOW OVER 300 BARRELS 160
COMPLETIONS IN ALL U. S. FIELDS FOR THE PAST WEEK 166
WILDCAT DRILLING REPORT FROM ALL SECTIONS 174
PERMITS GRANTED FOR NEW WELLS DURING THE PAST WEEK 188

Published Weekly by GULF PUBLISHING COMPANY
Copyrighted, 1927

R. L. DUDLEY, *President* — A. L. BURNS, *General Manager* — SPENCER W. ROBINSON, *Editorial Director* — J. KENT RIDLEY, *Managing Editor*

Office of Publication: 1716 Dallas Avenue, Houston, Texas.

NEW YORK: Room 832, 250 Park Avenue, R. P. Swinsky, Manager. PITTSBURGH: 2201 First National Bank Bldg., W. W. Pigue, Manager. CHICAGO: 476 First National Bank Bldg., O. R. Waller, Manager. LOS ANGELES: 1201 Haas Bldg., Wm. V. Gross, Manager. TULSA: 214-218 Atco Bldg., J. F. Carter, Jr., Manager. FORT WORTH: 203 W. T. Waggoner Bldg., H. H. King, Manager. Issued Friday of each week. Single copies 10 cents. Subscription price, Domestic $1.00 a year, Foreign $2.00 a year. Subscription restricted to those engaged in the producing and pipe line branches of the oil business or the manufacture and distribution of oil field supplies. Advertising rates on application.

Keeping Pace with the Trend Toward Steel Equipment

The Besse Steel Sand Reel Support

New in Design—
Greater Utility—

consists of a cast steel base plate on the knuckle block side to provide for the forward or backward adjustment of the swing lever to which is attached a cast steel, split bearing box with provision for a wide range of vertical adjustment.

The construction of the reel post is similar to that of the swing lever, in that the upright support and brace is made of 4"x3"x½" angle iron which is hot riveted to an angle iron base plate in which holes are provided for the proper adjustment of this member—either forward or backward. The reel post also is equipped with the adjustable bearing box.

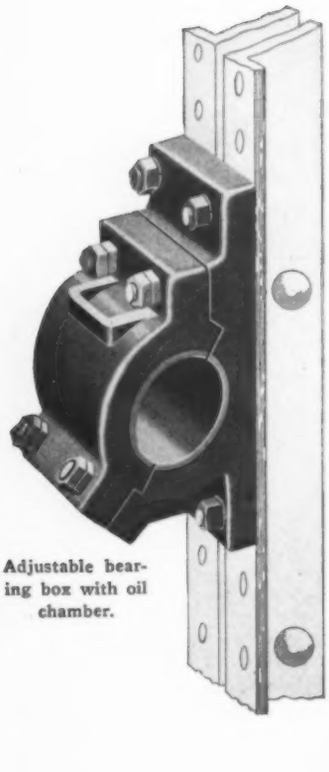
The bearing castings are lined with high speed babbitt and are furnished for either straight or beveled-face sand reels.

CONCERNING the utility and advantages of the steel sand reel support: it eliminates the cost of frequent rebabbitting and replacement of the old style wood knuckle block, swing lever and reel post, since it is an article that represents a complete salvage value. It overcomes the hazards of working with the old style and insecure sand reel support. It offers the advantage of being able to adjust the sand reel pulley to the proper friction contact with the face of the band wheel, which reduces wearing of the band wheel, prolonging its use and saves wear on the driving belt. By being adjustable vertically, the proper spooling of the sand line on the drums is insured at all times.

The oil chamber in the bearing box cap guarantees constant lubrication of the sand reel shaft bearing, prevents heating and substantially cuts down the bailing time.

SHIPPING WEIGHT, 1150 POUNDS

Adjustable features of base plate and swing lever.



Adjustable bearing box with oil chamber.

Manufactured by

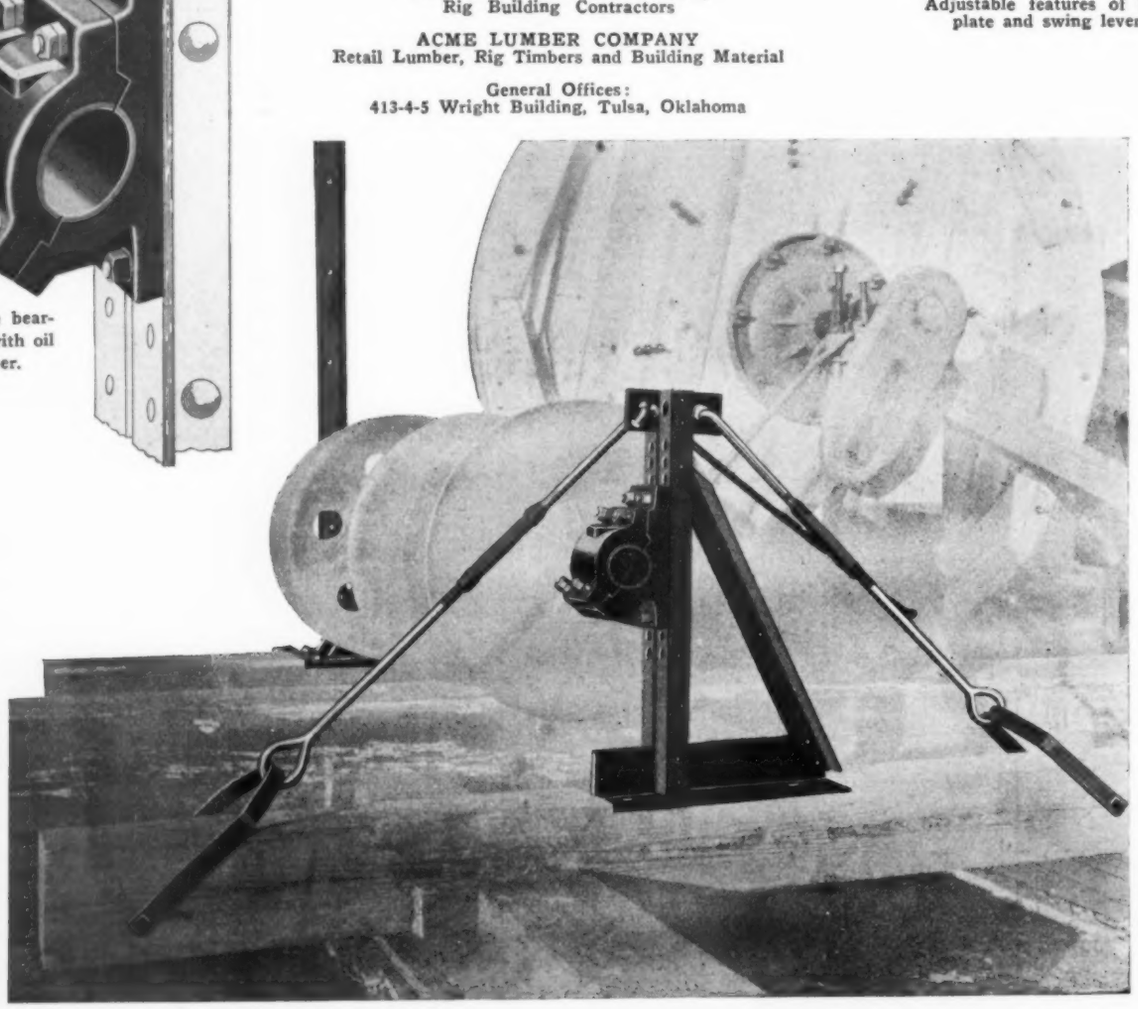
The National Turnbuckle Derrick Co.

General Offices:
415 Wright Building Tulsa, Oklahoma Phone 6347

Affiliated Companies:
MAHAN, McCARTY & BESSE,
Rig Building Contractors

ACME LUMBER COMPANY
Retail Lumber, Rig Timbers and Building Material

General Offices:
413-4-5 Wright Building, Tulsa, Oklahoma



Flood of Production Weakens Crude Market

Seminole output passes pipe line capacity and West Texas opens new areas; demand for refined products is weak

By KENT RIDLEY

FURTHER production advances and no improvement in the movement of refined oils is having its effect upon the morale of producers in the Mid-Continent in a large way and directly upon the crude market in a smaller way.

A further reaction of prices on refined products, fuel oil excepted, reflected on the crude situation in the North Texas district during the past week, and premiums demands for spot crude took a slump. Reduced plant operations among the smaller refiners followed in the wake of lower prices on gasoline and slack demand from both domestic and export jobbers, and this led to more spot crude being on the market than usual.

Seminole's spectacular jump in production early last week which brought the field's daily average for the week ending February 12 to 268,400 barrels was the only factor of mentionable significance playing a part in U. S. increase amounting to 59,850 barrels, American Petroleum Institute figures show. This is a large gain that has been made for a single week, with one exception, during the last year. Seminole's gain for the week was 42,400 barrels. Oklahoma fields combined showed a gain of 54,700 barrels for the week.

A revival of drilling in the Panhandle district brought an increase of 3800 barrels, the Gulf Coastal country was up 2250 barrels due to an increase in Spindle Top, while a 3000 barrel gain was made in the Crane-Upton County district of West Texas. California was down 5000 barrels in production for the week, the chief loss being in Huntington Beach field. Salt Creek field, Wyoming, was up 1200 barrels during the week. Smackover heavy crude showed the first comeback in production last week which has been made in the past four to six months, increasing from 100,950 to 102,550 barrels during the week ending February 12.

Seminole Passes Line Capacity

Seminole has the Mid-Continent oil industry by the tail and is making as much of the condition as a small boy at play with a house cat. There is considerable snarling on the part of the oil industry and a few passes of its paws, but its claws evidently are drilled. The latest snarl was a meeting of Seminole producers and pipe line concerns Tuesday afternoon to consider what is to be done with an oil pool whose output again is above the capacity of pipe lines and threatening to go still higher.

The meeting came to nothing so far as public information is concerned—its first action was a vote against the presence of oil publication writers in the conference room.

A committee of five was named to confer with pipe line concerns as to methods for handling the situation at Seminole. Those on the committee are George Moody of the Mid-Continent Petroleum Corporation, A. A. Beard of the Tidal Oil Company, E. B. Reeser of the Barnsdall Oil Company, H. N. Cole of the Pure Oil Company and N. T. Gilbert of the Truman Oil Company

The grip that Seminole has on the tail of the Mid-Continent industry is best expressed in an output Monday of 300,400 barrels for the day. That is above pipe line capacity and equal to the rated capacity of existing pipe lines and those building. This production figure must not be taken as actual, for no concern and no man seems sure of just what Seminole is doing.

While this total of daily production would seem to be sufficient grip on the tail of the industry, the worst part of the situation is the threat of still higher production. One estimate is that the peak output will be 439,000 barrels. This one is not exactly a guess for the figure was given after a calculation from existing data. There are guesses that Seminole will reach a half million barrels daily. There are also questions as to where that much oil will be put, for there is no prospect of sufficient pipe lines and storage to care for it.

With 500 active wells over the Greater Seminole area it can be seen where the guesses are born.

Not all these 500 wells are within known producing territory, neither is it known how many of these outside wells will open still other pools or extend present pools.

Calculations on Seminole are but little more than guesses at best, for the Mid-Continent oil industry and perhaps that of no other section ever has had a field of its kind to calculate.

Seminole production is not dependent on natural well flow or pumping. Gas flow methods are available as fast as wells are completed. That brings in a factor new to the industry. This artificial flowing method is responsible for the existing high output and is behind the guesses that are being made in the half million class.

One guess is as good as another. The shutdown or restricted development agreement made in November and carrying over into December has never been lifted officially but some of the concerns having production and little or no pipe line outlet of their own, are open in their declarations of never again entering a similar agreement. Meanwhile the Oklahoma Corporation Commission stands pledged to act whenever producers of the field are unable to handle the situation by agreement. Whether the corporation commission will act is a question. Apparently its members were relieved in November when producers announced their own methods of handling the situation. It may be forced to take a stand.

Scouting service out of Seminole is unsatisfactory—men working there find it difficult to get over territory that is a huge mud-hole—reports to headquarters are few and generally many hours behind schedule.

New Areas in Texas

New sources of bombardment against the Mid-Continent crude price structure developed over the past week when two widely separate fields in West Texas furnished heavy producers from practically virgin acreage. The completion of a 300 barrel per hour well on the lower end of the Church & Fields area, Crane County, by Simms Oil Company and the

(Continued on page 64)

DETAILS ON CRITICAL FIELDS

Pool—	Oil Wells Completed	Total Initial Production	Initial Per Well	No. Producing Wells	Daily Production Barrels	Daily Production Per Well	Rigs Up	Wells Drilling
PANHANDLE—								
Hutchinson County	762	436,100	572	744	116,590	157	67	168
Gray County	104	29,635	285	103	8,175	79	13	39
Carson County ...	80	26,530	332	71	6,625	93	22	49
Wheeler County .	17	5,950	350	13	1,670	128	9	18
Total	963	498,215	517	931	133,060	143	111	274
OKLAHOMA—								
Greater Seminole ar'a	243	340,301	1,400	230	286,406	1,245	143	476
CALIFORNIA—								
Huntington Beach and Barley Patch ..	169	129,050	763	138	50,135	363	22	95
Seal Beach	8	18,260	2,282	6	13,495	2,249	12	25
Ventura	84	164,232	1,955	78	49,320	632	7	17

EDITORIAL COMMENT

Ten Years

ON Tuesday, February 22, THE OIL WEEKLY shall have been under its present management ten years. A struggling infant at the time, with a total staff of four people, including the office boy, it has grown in size and influence that have kept pace with the ever increasing importance of the oil industry.

Those ten years have seen the entry of the United States into the world war, have seen the war prosecuted to a successful conclusion, with the petroleum industry outstanding in the service it rendered.

Those ten years have seen new fields opened in sections which were at the beginning of the period not not even dreamed of as oil producing.

They have seen new States added to the producing column, and new Nations as well.

They have seen the development of Ranger, Burkburnett, of Tonkawa, of the Los Angeles Basin in a tremendous way.

They have seen Smackover, Eldorado, South Oklahoma, New Nexico, new pools in Wyoming, Montana, and now Utah, come into the limelight.

Ten years have seen the oil industry the target of investigations, State and national, and yet coming out of each investigation with the nation's respect of the industry heightened.

Those ten years have seen days that were lean, as well as days that were fat. They have seen the spectre of underproduction rear its head in the days of war, with an industry fighting as it never fought before to supply the petroleum needs of our country and its allies.

And in all of those ten years we have never found the oil industry lacking. In all of those ten years we have never seen the day when the oil industry did not have on hand the necessary oil at the proper time.

Ten years have seen new developments in the refining of oil, and of the methods of producing oil. During that time we have seen drilling progress to depths thought unaccessible at the beginning of the period.

Ten years have seen the engineer, more or less "tolerated" at the beginning, develop into an important factor in oil production.

Ten years have seen THE OIL WEEKLY, and the company that publishes it take on statue, until there is not a nation on the face of the globe where oil is produced, that does not get its OIL WEEKLY, each week. Ten years have seen its staff grow until more than 100 people are directly employed by it.

Ten years have seen the development of the idea of "specialized oil journals", and have seen the original few hundred subscribers of the old Gulf Coast Oil News, now THE OIL WEEKLY, grow to more than 26,000.

These ten years have been ten good years for us, ten years filled to the brim with living and with service. They have been ten years of appreciated work.

To those thousands of subscribers, to those hundreds of advertisers, and those scores of friendly advisors to whom we have turned in need of advice, we give our thanks. All of you have helped.

R. L. DUDLEY,
PUBLISHER.

Wanted—Salesmen!

"DO you know of two good salesmen who are acquainted with the oil business, men who can represent us out in the field?"

It was the sales-manager of a large company calling THE OIL WEEKLY office.

"Sorry, but we do not," we replied. "You are the third man this week who has either called, written or telegraphed us asking for salesmen."

There seems to be a demand for salesmen now as there has never been before. Undoubtedly, the increasing manufacture of practical specialties for the fields is responsible. Then, too, the increasing area which supply people and manufacturers must cover requires more men.

THE OIL WEEKLY has many letters from men who have had no experience in selling, but who think that they have all the elements of a salesman. These letters are referred, as occasion demands, to companies looking for salesmen. But we have few letters from salesmen who are practical oil men as well.

That kind of a combination seems to be in demand. That kind of combination right now is "sitting pretty" because the oil industry is constantly demanding of the salesmen serving it, that they know, not only how the equipment is made, but exactly how it is used.

"We have plenty of time for the salesman who is well posted on his product, but no time for the fellow who 'stalls'" in effect is the notice we have seen posted in the buying department of one of the country's biggest oil companies.

Petroleum Leaders Predict Year Of Prosperity

Present indications all point toward favorable period during coming months

NINETEEN TWENTY-SEVEN will be a favorable year throughout the Petroleum Cycle.

A bold statement, but true, if based on the present outlook subject, of course, to a kind providence and a reasonable restraint in outlining new drilling programs.

At least, this briefly summarizes the opinions of some of the closer students of the business. In giving us an expression of their views, a number of which are being printed below, these executives voice what is the general feeling of the industry at this time, and that is one of prevailing optimism.

Among those who are willing to delve into the future, some are emphatic in their optimism while others, influenced by past experiences, are more hesitant in making favorable predictions. The latter group foresee prosperity in 1927, but urge caution.

Both divisions of thought, however, agree that the present year will witness the advent of a more definite stabilization than has yet been obtained. Present indications are that many factors will contribute to this result, among which to no small extent will be the ever increasing technical efficiency.

This increase in operating efficiency is expected to reach such proportions during the year that should production maintain its present level there should be no need for demoralization. Lower lifting costs and less exploration expense are expected to offset a slightly lower price, should the increase in output and cracking efficiency result in an excess of crude.

James H. Gardner

In speaking of the probabilities for 1927, James H. Gardner, President of the Gardner Petroleum Company, Tulsa, has the following to say:

"If the present production were to continue, it would mean a hundred million increase in 1927 and I believe the industry could absorb this amount without demoralization. I also believe that the Seminole district can make three hundred thousand without disturbance. Other flush fields are on decline, notably Spindletop and Panhandle. New discoveries will probably be made which will be needed to take the place of the Seminole field which will be on the decline the last half of the year 1927."

Walter Teagle

Walter Teagle, president of the Standard Oil Company of New Jersey, is not quite so optimistic and while predicting a favorable year ahead he emphasises the need for a let-up in drilling. He points out that we are now daily producing 250,000 barrels more of crude than is needed for present requirements. Mr. Teagle sums up his opinion of the situation as follows:

"Unless he has marvelous luck, any prophet who attempts in the first week of February to tell what is going to happen in the petroleum industry in the year 1927 will have cause to regret his temerity. I shall not attempt to forecast, but if it will prove of any help, will give my view of the industry's situation as of today.

"Well-meaning friends have never allowed me to forget that at the first meeting of the Institute I ventured into the realm of prophecy with the result that I had to journey to Chicago the following year to supply the qualifications which prudence should have attached to the predictions.

"The United States has always consumed currently more petroleum than for any corresponding period for previous years. The growth of the country, the increase in exports, and the wider use of automobiles has brought about a continuously increasing demand for products. This year's increase cannot be accurately forecast, because it depends very much on the activity of general business. However, it is generally assumed that 1927 will prove no exception and will show a further gain in consumption.

"We are and have been for several years past producing crude oil in excess of our needs. This condition is reflected in two ways. First, a considerable amount of petroleum in the form of fuel oil has been forced into what is considered uneconomic use, i. e. as fuel oil in competition with coal. Second, we have been adding almost every year to our stock above ground. At this writing we could stand a very substantial draft on storage stocks with benefit, but the indications are that not only will we draw no oil from storage, but that we will add materially to what we have now.

"It would be an excellent thing for everybody if producing activities would be curtailed, since we are producing more oil than is being consumed and the surplus must go into storage. The progress made in the improvement of cracking processes and the ever growing number of installations of cracking units has effected a big change in the number of barrels of crude needed to supply a given number of barrels of gasoline. We are producing easily 250,000 barrels of crude per day more than the industry needs for its present requirements. It is to be hoped therefore, that no new fields will be developed this year and that there will be a slowing up of the activity in drilling in the fields already producing. I am reminded in this respect of a story, said to be true, which was told of the early days of Pennsylvania's development when oil sold at 10 cent a barrel.

"An operator with acreage 40 miles from a railroad had gone to the city to make an effort to get his loans extended. While there he received the following from his foreman:

"Number 1 doing 350 barrels. Number 2 has just come in doing 300 barrels. Running the oil into the creek. Rush timbers and boiler for No. 3."

Amos L. Beaty

The possibility of over-production is not yet sufficient to cause alarm, says Amos L. Beaty, Chairman of Board of The Texas Company. He continues by saying:

"It is easy enough to forecast an adequate supply of gasoline and other petroleum products for the entire year 1927. The industry is not concerned about that; nor is it doubtful about consumption; it is thinking of prices. With the same certainty that an excessive cotton crop depresses the price of cotton, injuring the farmer and everybody else, an overproduction of crude oil plays havoc in the oil business and hurts all in sight, beginning at the landowner who would like to have a test well and extending to the fellow who is trying to earn his bread by running a filling station, including all interveners and not excepting the big companies. So the question is: Are we to have too much crude oil? When the inquiry is thus narrowed there is nothing to do but look in the ground and see what is coming. Very simple!

"My serious view of the matter is that we have promise of a good year. The possibility of everproduction is not yet sufficient to cause alarm. This business, already one of the most important in the nation, is increasing rapidly from year to year. Those engaged in such a business have a right to expect prosperity."

George Otis Smith

George Otis Smith, Director of the United States Geological Survey, sees conservations as a prominent factor in determining the outcome of 1927. He says:

"The past year in the oil industry has been described as a red-letter year, but

(Continued on page 52)

Production During 1926 Above Four-Year Average

Estimate given in paper read in production symposium of A. I. M. E. at New York shows relative position of districts

By VALENTIN R. GARFIAS
Manager Foreign Oil Department, Henry L. Doherty & Company

THE World's production of petroleum during the year 1926 is estimated at 1,096,000,000 barrels, showing an increase of about 29,000,000 from that of the previous year and being somewhat larger than the average during the last four years, which is about 1,049,000,000 barrels. The daily average during the year may be estimated at 3,000,000, of which the United States produced 2,123,000 and other countries 877,000 barrels.

The outstanding developments during the year have been the decline of the Mexican fields, the counterbalancing of this decline by the increases in the Venezuelan and Russian production and the increases in Roumania and Columbia.

During the present year the United States, Mexico and Russia retain their relative positions as the three leading producers, while Venezuela probably outranked Persia for fourth place, Roumania passed Dutch East Indies for sixth, and Columbia moved from the sixteenth to the eleventh position. It further appears that should present conditions develop normally throughout 1927, it is not improbable that Mexico will be outranked by Russia as the second oil producing country, and that the increased yield of Colombia will place this country in eighth or ninth position and ahead of India.

The United States and Mexico should produce in 1926 about 79 per cent, and the aggregate of the seven leading countries should be close to 95 per cent of the total. It is interesting to note that about 85 per cent of the total comes from fields in the American continent, the United States accounting for about 71 per cent, and Spanish American countries and Trinidad for 14 per cent.

The production of countries other than the United States and Mexico has gradually increased during the last four years and now represents about 21 per cent of the total.

United States

The United States easily retains its long standing leadership with a total yield of 775,000,000 barrels, or an average daily yield of 2,123,000 barrels, representing about 71 per cent of the total, this percentage being about equal to that of the previous year. An increase in production of about 11,000,000 barrels is indicated by the statistics so far available. It will be noted that the American production in the last four years has averaged about 746,000,000 barrels yearly and that this uniformity, as well as the marked increases of the previous years, has been sharply reflected in the corresponding world's total yearly output.

WORLD'S PETROLEUM PRODUCTION
(Thousands of barrels)

	1924	1925	1926
United States	713,940	763,743	*775,000
Mexico	139,497	115,515	90,700
Russia	45,312	52,448	62,000
Venezuela	8,754	19,687	36,500
Persia	32,373	35,038	35,400
Roumania	13,303	16,646	23,500
Dutch East Indies	20,473	21,422	21,700
Peru	7,812	9,164	11,000
India	8,150	8,000	8,000
Argentina	4,659	5,818	6,500
Colombia	445	581	6,000
Poland	5,657	5,960	5,600
Trinidad	4,057	4,654	5,500
Sarawak	4,163	4,257	4,500
Japan	1,959	2,000	1,820
Egypt	1,122	1,226	1,250
Germany	406	411	600
France	426	459	550
Canada	164	318	350
Czecho-Slovakia	75	50	50
Italy	45	45	50
Algeria	12	12	12
Cuba	4	4	4
Others	109	108	109
TOTALS	1,012,927	1,067,566	1,096,690

The crude and refined oils available in the United States in each year from 1920 to 1925 exceeded the demand. This resulted in the accumulation in storage of an additional surplus during the last six years, estimated at 340,000,000 barrels. The year 1926, however, shows a radically changed situation as there has been an excess demand over supply, causing a reduction of the stocks estimated at 30,000,000 barrels against an increase in stocks of about 27,000,000 in the preceding year. This change has been interpreted by some to represent the long expected turning of the corner heralding a more stable situation and a brighter future for the American oil industry.

Mexico

The Mexican production which during 1926 will average daily close to 248,000 barrels, declined about 25,000,000 barrels, or about 21 per cent from the preceding year, against a decline for 1925 of about 17 per cent.

Russia

Judging by the information available regarding conditions in the Russian fields, it is estimated that the production during the year will be about 62,000,000 barrels, or about 170,000 barrels daily average, representing about 5.7 per cent of the world's total production, and an increase of about 10,000,000 barrels over the previous year.

Venezuela

The production of the Venezuelan fields increased from 19,700,000 to 36,500,000, the country's yield averaging about 100,000 barrels daily, which is equivalent to 3-1/3 per cent of the world's total and as a result Venezuela will probably outrank Persia for fourth position.

Persia

The production of Persia probably increased slightly during 1926, the total being estimated at 35,400,000 barrels, a daily average of close to 97,000 barrels. It is reported that the output might have been greater were it not for the policy adopted by the Anglo-Persian Oil Company to limit the production of wells.

Roumania

The Roumanian fields should reach a new high of about 23,500,000 barrels or about 64,400 barrels daily average, and it is remarkable that this region, which has been producing for about 70 years, is now at its producing maximum. The country produced a little over 2 per cent of the world's output.

East Indies

The fields of Dutch East Indies continue to show a slow gradual gain, the total being estimated at 21,700,000 barrels, or close to 60,000 barrels daily.

Peru

After thirty years of producing life the Peruvian fields should reach a new peak in 1926, estimated at 11,000,000 barrels. The country is producing about one per

(Continued on page 214)

*Figures given in the accompanying reviews are at variance with those for the United States compiled by The Oil Weekly and compared with those of the United States Bureau of Mines and the American Petroleum Institute.

Check of Figures Shows Output Gain Is Slight

Comparison of production statistics for United States shows variations in figures, with totals running high

By A. R. McTEE
Staff Representative

IN spite of two phenomenal fields discovered in 1926, the Texas Panhandle and Seminole in Oklahoma, with a few others of less importance, United States petroleum output increased only 5,664,000 barrels over 1925. Production estimates compiled by THE OIL WEEKLY and checked against American Petroleum Institute figures as well as those compiled by the United States Bureau of Mines, show the United States total to be 764,796,875 barrels. This gives a daily average for the year of 2,097,870 barrels.

These figures are slightly below those compiled by the Bureau of Mines, and are approximately 10,000,000 barrels below other estimates recently published. However, THE OIL WEEKLY total checks closely with the A. P. I. weekly estimates and also follows closely the A. P. I. daily average. Recent revisions by certain companies indicate that figures given to the public on the Texas Panhandle have been, generally speaking, too high, a fact which may have something to do with the variation in estimates.

Only two states showed losses for the year and these were Arkansas and California. However the 19,660,900 barrel drop in Arkansas, aided by the decrease of 7,651,960 barrels in California, offset by more than 3,000,000 barrels the 24,000,000 barrel gain in the Texas Panhandle, the only single gain of consequence that was not offset by a single loss in some other pool.

Speaking in round numbers the total gain from all states was about 33,860,000 barrels. Against this was the loss of approximately 28,200,000 barrels in Arkansas and California, leaving the net gain of 5,660,000 barrels.

More Wells Drilled

Increased drilling gave 3,589 more wells than in 1925. There were 1,625 more producers, 204 more gas wells, and 1,760 more dry holes. Texas, Oklahoma, Mountain States, Louisiana and Kansas showed gains in field work.

Notwithstanding these gains, initial production decreased 764,113 barrels.

Texas, due to important discoveries in the Panhandle, Western and Spindle Top fields, was the State expected to wield the strongest influence. It did show the heaviest production gain of any other one State and field work surpassed by far any other district. Oklahoma was nearest to Texas, but there were 3,190 fewer wells drilled in Oklahoma. The production gain there over 1925 was 6,440,600 barrels less than that in Texas.

U. S. PRODUCTION FOR 1926

State—	Total Barrels	Daily Aver. Barrels
Arkansas	59,056,786	161,800
California	224,117,015	614,020
Eastern States	38,322,230	104,920
Kansas	40,302,370	110,420
Louisiana	24,007,875	65,640
Mountain States	37,680,885	103,235
Oklahoma	176,450,580	486,165
Texas	164,858,034	451,670
Totals	764,796,875	2,097,870

Texas gained 58,924,900 barrels, approximately. Sharing in this increase were about 28 fields and districts, among them several new pools including the Panhandle and Spindle Top deep sand. Offsetting the increase were combined slumps from 24 fields, amounting to 44,077,000 barrels, resulting in the net gain for the entire year's operation, of 14,847,800 barrels.

At first glance this seems a small increase over last year's figures in the face of 2,015 more wells. However when one begins to inspect the fields showing losses, it is found that some of the decreases have been enormous: Wortham, for instance, more than offset the total increase at Spindle Top, with a drop of 13,588,060 barrels; Corsicana-Powell decreased its output as compared with 1925 by 7,019,230 barrels, and Mexia lost 3,506,935 barrels. Thus the two last named Fault fields did much toward counter-balancing the heavy gain in West Texas.

In studying the results of drilling, it is also interesting to notice initial production for both 1925 and 1926. In spite of additional wells in 1926, the gain in initial output was only 337,422 barrels. Often in the excitement of calculating the output of new fields the individual well average is lost sight of. Figures in this connection for the new districts in Texas are worth mentioning.

Texas Well Average

Taking the State as a whole, the well average for initial production was 157 barrels plus. Hutchinson County wells averaged 512 barrels, and Panhandle Miscellaneous wells were about 400 barrels. Crane-Upton County producers went a little better than 300 barrels. Throughout other districts in North and West Texas the average was much lower. The highest average was reached in the Gulf Coast, where at Spindle Top the average was better than 2500 barrels. For the entire Gulf Coast, however, the figure is considerably smaller.

Archer County showed the greatest number of wells of any other one county, with a total of 1385. Brown County was second, with 729 wells, and Hutchinson County was third, with 709 wells. Others with a high average were Montague County, the South Vernon district, Young County, and the Laredo district.

The extent of development throughout the Panhandle and West Texas sections this year is problematical. Hutchinson County, the big source of Panhandle oil last year, is believed by many operators to have passed it peak output. Many of the major companies are turning toward Carson, Gray and Wheeler Counties for further flush production, and there is also other wildcat territory in the region to be tested.

Three pipe lines now being built to the Panhandle and West Texas will be ready to take oil by spring and should aid in maintaining production near its present level, at least, if not actually cause its increase.

Due to the demand for natural gas in Southwest Texas there was practically twice as much drilling for gas during 1926 as in 1925, resulting in 266 successful wells, nearly twice the number completed in 1925. Several new gas districts were discovered in the Laredo territory and the completion of two pipe lines into this area assures continued exploration.

Drilling for oil was also given impetus in the Escarpment region by the first pipe line to tide-water, completed about the middle of the year. Later a second line was laid to the district, stimulating drilling by putting competition into the crude market. The effect of the two lines will undoubtedly do much to sustain development during 1927.

Discovery of the Randado pool toward the lower end of the Escarpment, extension of the Aviator pool, and small discovery of oil in the Carolina-Texas gas field constituted the high lights of operations during the year.

Gulf Coast Increase

In the Texas and Louisiana Gulf Coast the increase contributed largely by Spindle Top and Lockport, was above 11,000,000 barrels, 1,000,000 barrels of which was from Lockport. On the Texas side, the principal gains were from Spindle Top,

Boling, and Pierce Junction. Most of the other old fields continued their general decline.

During 1927 work in the Texas Coast will probably be concentrated at the following districts where good showings or extensions have been found: Markham, Matagorda County; Raccoon Bend, Austin County; Fannette, Jefferson County; Clemens Dome, Brazoria County; the West Extension of South Liberty, Liberty County; Northwest Extension of Blue Ridge, Fort Bend County; and Pierce Junction, West Extension, Harris County.

Commercial production can also be looked for from the following Louisiana areas, several of which have been proved already: Sweet Lake, Cameron Parish; Eagle Point, Iberia Parish; the deep sand in the old Edgerly field; Starks Dome, Calcasieu Parish; Sabine Parish, and Hackberry Island, North Calcasieu Parish. Lockport will probably double its 1926 production.

North Louisiana

The total gain in Louisiana was 2,592,990 barrels. Drilling doubled itself in 1926, due principally to discovery of the Urania field. This district was brought in early in the year and there were 331 producing wells drilled, production of which averaged 170 barrels. Output of the field for the year was 4,002,740 barrels.

A revival of work in the old Caddo field yielded 178 more wells than were drilled in 1925 and initial production was twice the 1925 figure. The total gain for the year, however, amounted to only 424,600 barrels.

As has been mentioned previously, Arkansas suffered the most pronounced slump in production as well as field work, of any other State. Smackover was off as compared with 1925, 21,612,140 barrels. Lisbon, the only new field of consequence brought this drop to 19,660,900 barrels with new production of 2,241,300 barrels. In the Lisbon area 397 wells were drilled, 361 of which were producers. There was also a slight spurt of work in the Nevada field and drilling showed twice the number of wells completed in 1925. Production of the district went up only 200,000 barrels. Drilling also increased in the Stephens field, but there was no gain in output.

Oklahoma Gains

The entire gain in Oklahoma amounted to only 8,499,000 barrels. This was shared in by 18 pools, and the total gain of the 18 was much more, but heavy losses reduced this to the figure given above. Seminole was the only new field of consequence in Oklahoma, discovered in 1926, and judging from present output of that field, its greatest influence on the State total will be felt this year. The bulk of Seminole production, however, is coming from the Wilcox Lime, a formation famous for its freaky nature and instability as a steady producer. Artificial flowing methods are now causing a great increase in the Seminole output, but no one can tell how long the oil will hold out.

Drilling in Oklahoma for 1926 netted 891 more wells than 1925. Of this number there were 402 more producers and 86 more gas wells, with 403 dry holes. Initial production was up 236,249 barrels.

Developments in the shoe-string pools of Russell, Cowley, and Greenwood Counties, Kansas, were responsible for 5,904,610 barrels gain in that State. There were 314 more wells drilled than in 1925.

Mountain States

Although drilling throughout the Mountain States district exceeded that in 1925 by 636 wells, the net gain was only 527,010 barrels. A great bulk of the work done was confined to the Salt Creek, Wyoming, field, and Kevin-Sunburst, in Montana. Deeper pay horizons were uncovered in both these fields, resulting in much deepening of old wells and drilling of new ones at the same time. A few isolated strikes commanded attention, notably that in San Juan County, Utah. In this remote territory a well was brought in, or rather it blew in unexpectedly, but was never put under control. Efforts are still being made to complete the well and make a producer of it. This year will probably bring Utah to the list of States with commercial production. There is much to be overcome on account of the isolation of the location, but if oil is found in sufficient quantities, the difficulties will vanish just as they have in other districts.

California Decline

A gradual let-up in work throughout Southern California resulted in production losses totaling 7,651,960 barrels, and fewer completions by 155. The Huntington Townsite area, Los Cerritos, and Seal Beach, and Ventura Avenue, were centers of most of the new work undertaken in the Los Angeles Basin. Field work at Huntington Beach was doubled and 3,200,000 barrels more oil was recovered. Ventura Avenue gained 14,700,400 barrels, and there was a half-million barrel increase at Seal Beach.

Predictions for 1927 are that with the heavy drilling program now taking place at Seal Beach, California production is practically certain to maintain itself near present figures, if not to increase.

Eastern States

Eastern States output gained 705,600 barrels. Drilling held practically at last year's figures, decreasing by only 18 wells. The field at Saginaw, Michigan was the only new area discovered, but there were many minor extensions in the old pools.

Preliminary estimates on world production for the year indicate an increase of 29,130,000 barrels. Notable increases were reported from Russia, Venezuela, and Roumania, Venezuela leading.

Steady development with the discovery of several new pools in the principal South American field gave a gain of 17,000,000 barrels over 1925.

Completion of a 328-mile pipe line to the Infantas field in Colombia, opened that area to world markets, and this field will probably figure in South American production in 1927.

Rehabilitation of Russian properties under management of the Soviet Government, is resulting in a steady upward tendency in production. The gain in 1926 was 10,000,000 barrels.

In Roumania, as in Russia and Poland, Americanization of methods has brought about notable increases in output. All fields will undoubtedly produce more oil this year than last.

Growth in demand for petroleum products among foreign countries is also having much to do with increasing activity in foreign fields.

Mexico lost 15,000,000 barrels during the year and may show a much greater loss in 1927.

Petroleum Leaders Predict Year of Prosperity

(Continued from page 49)

it might have been added that the net results were not written in red figures. All records were broken, so that we have new measures of the country's ability to produce petroleum and consume petroleum products. Again those of us who stand on the side lines must testify how wonderfully responsive to every demand this industry is.

Much attention has been given in these later years by students of the subject of the question: How long can America's reserve of oil in the ground continue to meet this ever-increasing drain? The practical recognition that oil is a wasting asset, a limited resource, is becoming more and more keen. What has impressed me in the last few months is that more attention is also being paid to realizing on another resource, which fortunately is not limited in the same sense or to the same degree as the underground supply of oil. This national resource of inventive genius, masterful management, and financial courage has been drawn upon throughout the seven decades of the industry's marvelous growth, but never before has the spirit of full utilization been so earnest. Indeed, a new spirit seems to have arisen in the land, all the way from Long Beach to Broadway. The word "conservation" is in good standing with oilmen, and what is even better, the idea of efficient production has a host of earnest advocates.

"All of us who are interested in national security must see a turning point in the spirit of helpful inquiry which seems to have inspired the efforts of the Federal Oil Conservation Board and in the splendid response given by the forward-looking leaders of the industry to President Coolidge's declaration that "Government and business can well join forces to work out this problem of practical conservation."

Output Gain Reveals Advances in Production Technique

Trend of the petroleum situation reviewed in paper presented before A. I. M. E. meeting at New York

By JOSEPH E. POGUE
Consulting Engineer

(*Copyright, 1927, by the American Institute of Mining and Metallurgical Engineers, Inc.*)

THE keynote of 1926 was a reduction in stocks of all oils to the extent of approximately 24,000,000 barrels, or 4.4 per cent, of which roundly 3,000,000 barrels representing a fire loss in California, leaving 16,000,000 barrels as a measure of deficiency of current supply. This reduction in stocks, while moderate in view of the 518,000,000 barrels still on hand, is nevertheless worthy of note following a seven-year period of growing inventories, as shown in Table 1.

It may be noted from Table 1 that in 1926, as compared with 1925, the supply of all oils increased 2.1 per cent, while the demand for all oils increased 7.6 per cent.

The rate of change in stocks of all oils by months from 1922 to the present is shown in Fig. 1. This diagram illustrates the marked improvement in the statistical position of the industry that characterized the latter part of 1925 and nearly all of 1926, as compared with the preceding period. The closing months of 1926, however, may be observed to have undergone a progressive impairment of position as compared with the earlier part of the year.

Production

Production of crude petroleum in the United States in 1926 declined during the early winter, increased steadily during the spring and summer, and mounted sharply during the fall, ending the year at approximately 2,400,000 barrels per day, the highest level ever attained. (See Fig. 2.) For the year as a whole the output totalled about 767,000,000 barrels, an increase of 11,000,000 barrels, or 1.3 per cent, over the quantity produced in 1925. As shown in Fig. 2, the 1926 output ran below the 1925 levels during the first seven months of the year, but forged progressively ahead thereafter.

The marked expansion in production was caused primarily by the development of three major fields, the exploitation of a much greater number of smaller pools, and the application of improved production technique that operated to retard the normal decline of old wells. The part played by the three major fields—Panhandle, Spindletop, and Seminole is shown graphically in Fig. 3, which illustrates the rapidity with which these three sources of supply came into prominence under the influence of intensive competitive drilling. The contribution made by improved production technique was very important although it is impossible to measure this factor statistically. A survey of the weekly production figures for individual pools, however, as reported by the American Petroleum Institute, will reveal the extremely slow rates of decline that characterized the settled elements in the national production. A specific example of arrested decline is shown in Fig. 4B, which illustrates the effect of the gas lift on production in the Dominguez pool in California. The application of air or gas under pressure to increase the flow of oil wells impressed itself on the 1926 aggregate output of petroleum and holds even greater promise for the future. At first directed only to old wells, these methods are now finding application in prolonging the flush flow of wells in the gusher stage and, where used, are radically altering the normal course of decline curves.

New factors of economic control also came into prominence, but more with implications for the future than as active forces bearing on current production. The *desideratum* of unit operators, as a means for reducing competitive efforts in drilling and conserving gas for a more complete utilization as an extractive agent in the recovery of oil, gained much attention within the industry, and in the deliberations of the Federal Oil Conservation Board. Examples of unit operations are even now not unknown in practice (see for Example, Fig. 4A). There is a natural tendency in this direction through the leasing of large blocks in less populated regions and as a result of the newer methods of geophysical search—trends that will doubtless become more important in the future as wildcatting moves further from the individualistic stage.

THE outstanding features of 1926 in the petroleum industry including the following:

1. *Stocks of all oils (crude and refined) were reduced, making the first annual decline since 1918.*
2. *Domestic crude oil production increased steadily during the last 11 months of the year, accelerating during the fourth quarter, and ending the year at the highest level ever attained.*
3. *Three new major fields were developed—Panhandle, Spindletop and Seminole.*
4. *Important advances were registered in production technique, tending to retard the decline of old wells and to maintain the flush periods of new wells.*
5. *The problem of gaining greater economic control of production through unit operations and gas conservation received growing recognition by the industry and the Federal Oil Conservation Board.*
6. *The rate of drilling was sharply increased during the second quarter of the year and suffered only a very slight retardation during the closing months.*
7. *The runs of crude oil to stills were maintained above normal throughout the year and underwent acceleration during the fourth quarter.*
8. *The gasoline situation was marked by a continuous and substantial increase in the rate of production of cracked gasoline, and by an improvement in the statistical position of the commodity.*
9. *Prices of both crude petroleum and its principal derivatives were characterized by more profitable levels and greater stability than for a number of years past; and while showing declines during the fourth quarter, prices did not recede sufficiently to slow down materially either drilling or refinery operations.*

Drilling

During 1926, 18,032 oil wells were completed east of California with a total initial production of 3,299,000 barrels, as compared with 15,611 oil wells with a total initial of 3,793,000 barrels in 1925. At the close of 1926, there were 5891 rigs up and wells drilling east of California, an increase of 1184 over December 31, 1925. Table 2 gives the trend of drilling activities in the United States (exclusive of California) from 1913 to the present. During recent years, the number of operations are less but the calibre of the wells is larger, reflecting the results of deeper drilling.

The trend of drilling operations during 1926 and three years preceding is shown in Fig. 5, which also illustrates the high degree of correlation existing between drilling operations and price. A cut in the

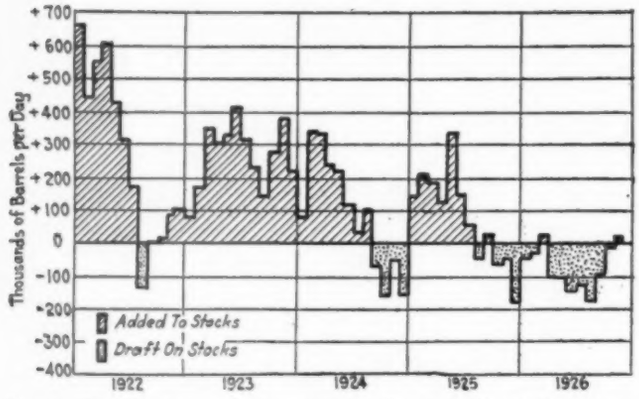


Fig. 1—Rate of change in the stock of all oils in the United States by months, 1922-1926.

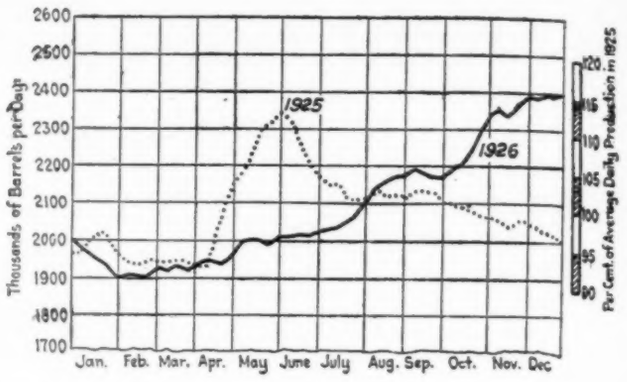


Fig. 2—Daily rate of gross production of crude oil in the United States in 1926, compared with 1925.

price of crude oil operates to slow down drilling activities, while an advance in price stimulates the starting of new wells and is soon reflected in a rise in the number of completions. It may be observed from Fig. 5 that drilling operations were only moderately retarded by the price declines in the closing months of 1926, and 1927 was entered with relatively considerable drilling momentum.

Refinery Operations

The best criterion of refinery operations is the monthly volume of crude oil charged to stills. The actual figures as reported by the U. S. Bureau of Mines, however, are rendered more significant if adjusted, by appropriate methods, for the seasonal and growth elements and thus converted into an index expressing the runs to stills in percentages of computed normal. This procedure has been followed and the results are presented graphically in Fig. 6. This diagram indicates that for the past two years refinery operations have ranged substantially above computed normal, thus correlating with business activities in general and reflect-

(Continued on page 150)

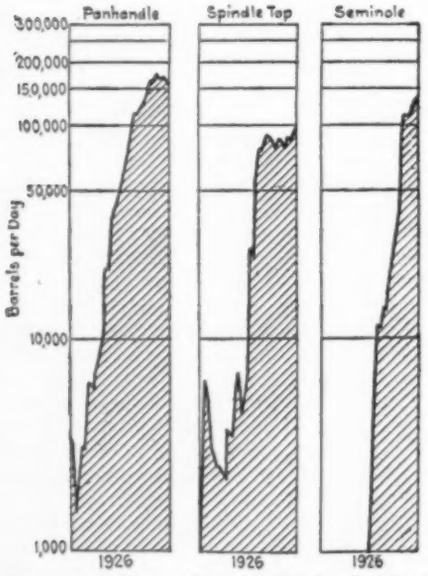


Figure 3.—Course of production in the three major oil fields exploited in the United States in 1926, illustrating the rapidity of development under competitive conditions

Table 1—Supply of, Demand for, and Stocks of, All Oils in the United States By Years, 1918-1926.

Data largely from Federal Oil Conservation Board and U. S. Bureau of Mines Stocks Calculated by Author.

Year	Supply (Milligrams Bbl.)	Per Cent Change	Demand (Milligrams Bbl.)	Per Cent Change	Stocks (Approximate) (Milligrams Bbl.)	Change in Stocks (Milligrams Bbl.)
1918	395		420		161	— 25
1919	433	+ 8.4	426	+ 1.3	168	+ 7
1920	552	+27.3	524	+22.9	196	+ 28
1921	601	+ 8.9	517	— 1.2	280	+ 84
1922	693	+15.0	591	+14.2	382	+102
1923	832	+20.0	731	+23.7	483	+101
1924	808	— 2.9	777	+ 6.1	514	+ 31
1925	834	+ 3.0	806	+ 3.7	542	+ 28
1926*	851	+ 2.1	867†	+ 7.6	618	— 24‡

*December estimated. †This figure does not include 8,000,000 barrel fire loss. ‡Includes 8,000,000 barrel fire loss.

Table 2.—Well Data Covering the Oil Fields of the United States (Exclusive of California) by Years, 1913-1926

Year	Number of Oil Wells Completed	Total Initial Daily Production, Bbl.	Average Initial Daily Production per Well, Bbl.	Number of Rigs Up and Wells Drilling end of Year
1913	18,824	781,000	42	3,102
1914	16,140	1,471,000	91	1,953
1915	8,892	1,715,000	193	2,835
1916	18,080	1,497,000	83	3,956
1917	15,673	1,383,000	88	4,908
1918	16,698	1,486,000	88	6,360
1919	20,686	3,366,000	163	9,699
1920	26,738	3,388,000	127	8,748
1921	13,943	2,640,000	189	6,148
1922	16,201	3,912,000	241	5,339
1923	15,327	3,917,000	255	4,029
1924	13,533	2,747,000	203	4,632
1925	15,611	3,793,000	243	4,707
1926	18,032	3,299,000	183	5,891

Table 3.—Gasoline Data in 1925 and 1926

Year	Production Cracked Gasoline (Million Bbl.)	Production Other Gasoline Plus Imports (Million Bbl)	Total Supply (Million Bbl.)	Domestic Consumption (Million Bbl.)	Exports (Million Bbl.)	Total Demand (Million Bbl.)	Per Cent Change from Previous Year	Stocks End of Year (Million Bbl.)
1925	69	193	262	224	32	256	+19.4	39.3
1926*	91	206	297	254	44	298	+17.3	39.1

*December estimated. Subject to revision.

Table 4.—Trend of Production, and Percentage Recovery, of Kerosene and Fuel Oil by Years, 1922-1926

Year	Crude Oil Run to Stills (Million Bbl.)	Production Kerosene (Million Bbl.)	Production Fuel Oil (Million Bbl.)	Recovery per Barrel of Crude to Stills Kerosene, Per Cent	Recovery per Barrel of Crude to Stills Fuel Oil, Per Cent
1922	501	54.9	255	10.9	50.8
1923	581	55.9	287	9.5	50.2
1924	644	60.0	320	9.3	49.7
1925	740	59.7	365	8.1	49.4
1926*	781	61.7	364	7.9	46.6

*December estimated.

Table 5.—Exports of Oil from the United States by Years, 1922-1926 (in Millions of Barrels)

Year	Crude Oil	Gasoline	Fuel Oil	Other Products	Total, All Oil
1922	10.8	14.2	18.5	29.4	72.9
1923	17.5	20.8	33.4	28.7	100.4
1924	18.2	29.0	37.2	31.1	115.5
1925	13.4	31.7	36.2	30.5	111.8
1926	15.2	44.2	38.0	32.8	130.2

*December estimated. Figures subject to revision.

Research Program Need Stressed At Engineers' Meeting

Trend toward technical development reflected in attendance at Petroleum Division of A. I. M. E. conference at New York

By SPENCER W. ROBINSON

New York, N. Y.—The value of an active research program for the producing branch of the Industry was stressed at the first round table discussion to be devoted to this subject, which opened the annual meeting of the Petroleum Division of the A. I. M. E. here Tuesday afternoon. A subsequent meeting of this symposium will discuss research problems in other branches of the industry.

At the meeting Tuesday afternoon much valuable data was presented by engineers representing all parts of the country who took active part in the various discussions dealing with the many outstanding research problems now foremost in the minds of all operators. Considerable discussion was heard on subjects of a theoretical nature while a much greater time and interest was given over to "Applied Research."

From the interest manifested at the round table Tuesday afternoon it is thought that this initial meeting might be the nucleus around which at some later date a definite research program covering field practice and methods will be established.

E. O. Bennett, production engineer for the Marland Oil Company with headquarters at Ponca City, said that the field engineers laboratory must of necessity be the center of operations in the field. In other words each well is the engineer's laboratory for that particular development. In this connection, Mr. Bennett emphasized the necessity for a closer co-operation between the companies in working out solutions to field problems. When questioned as to the advisability of companies giving out the result of their individual research, Mr. Bennett answered, that he was firmly convinced that only good could come from such an exchange of data.

Need for Co-operation

James H. Gardner, president of the Gardner Petroleum Company at Tulsa, agreed with Mr. Bennett, that there is a vital need for closer co-operation between the various operating companies. Mr. Bennett later pointed out how by such co-operation in the matter of air and gas lifts a greater ultimate recovery could be obtained, if all parties concerned would use the same pressures, etc.

One problem of research that Dr. George, with the Oklahoma University, said should be given careful consideration in any program or work of this type, was whether or not the figures showing that only 20 per cent of the oil is now being recovered could be applied to every territory. The discussion which followed this indicated that in some localities it had been found by the use of core drilling that it would be impossible to estimate the recoverable oil left in the sand, since the sand was not uniform but to the contrary very spotted. Then too, areas with high flush output might show a higher recovery percentage. It was intimated that research along this line might find that previous estimates of future reserves based on the figure of 20 per cent recovery would be considerably out of line.

Just what future action will be taken to establish a program of research in the producing branch of the industry is problematical, but the tendency toward greater operating efficiency, in the opinion of the engineers present at this meeting, will force such a movement before long.

Vanentin R. Garfias, with the Doherty interests, called attention to the fact that in foreign countries such as Roumania, Russia and Poland, great strides had already been made in research work. It was Mr. Garfias' suggestion that a complete resume of what has and is taking place in these fields be secured and studied in connection with any research problems dealing with a greater recovery from old sands, that might be undertaken.

At the Tuesday afternoon symposium on Petroleum Economics, J. E. Pogue presided. About 200 attended this session.

Place of Petroleum

Arthur Knapp read the first paper on the "Place of Petroleum in Industry." He quoted authorities to the effect that the capital invested in the petroleum industry is approximately ten billion dollars, which is an enormous investment when it is considered in what a short time this capital has been accumulated.

The estimate of the total value of the crude oil at the wells in 1925 was more than a billion and one quarter, while in 1924 it was over one billion dollars.

In discussing the economic trend of the gasoline situation, B. Bryan, Jr., stated that the perfecting of the cracking process in 1923 doubled the potential gasoline in the stocks of oil above the ground. The economic effect was the equivalent of an increase in crude stocks of 250 million barrels of crude in a year. Any oil selling for less than gasoline by a margin greater than the cost of overcoming its particular cracking difficulties, had because potential source of gasoline and also a depressing influence of gasoline and also a depressing influence on the price of crude. Bryan stated that the price of crude oil is unsound and is due to drop. The price of gasoline is sound and will average better than crude oil.

G. R. Hopkins read a paper on the economics of natural gas gasoline production and an increase of 23 per cent over the previous year's yield. Brown, in the discussion, pointed out that evaporation losses must be prevented. Over six per cent was lost by evaporation five years ago in the production of refined gasoline. This should be brought down to two per cent.

Mr. Knapp suggested that more attention be paid the problem of "wild" gasoline, the highly volatile hydrocarbons which are thrown away or used to a very slight extent. Some utilization should be found for this material.

Economics

C. C. Ashorn talked on the economic position of fuel oil. W. F. Parrcali discussed the economic trend in the lubricating oil situation. He said that the upward tendency of the price of industrial cylinder oils is due to the facts that these oils are made of the same heavy cylinder stock used as a compounding medium to such a large extent for all paraffin motor oils.

J. W. Blake's paper on "The Tanker Situation" was read by C. P. Watson. The situation suddenly changed late in 1926 and the charter rates increased from 68 to 90 cents in June, 1926, to $1.25 to $1.30 early in 1927. The cost of moving oil jumped 40 per cent in four months.

Prof. R. Johnson read W. B. Gealy's paper on the distribution of price changes of crude petroleum. The stabilization of gasoline prices was confirmed by this analysis. Regular fluctuations occur in the same months and days in various parts of the country. The minimum price difference between fuel oil and motor gasoline which would warrant cracking, was considered by Arthur Knapp in the general discussion which followed, to be seven and one-half cents. If cracking costs more than this figure the fuel oil should be sold as such.

The increasing trend of the industry toward technical development is reflected in the attendance of engineers, economists and technicians at the meeting here this week. The program which deals with every division of the industry is a notable departure from the usual convention gathering previously experienced by the industry. Technical papers followed by enthusiastic discussions are opening up new avenues of thought and much valuable data and information can be secured.

The more important of these discussions and papers will be published in subsequent issues of THE OIL WEEKLY.

Venezuela Becomes Fourth Largest Producing Country

Review presented in paper before A. I. M. E. shows that most of increase came from old fields; new areas active

By A. FAISON DIXON

TO those who have watched it from the beginning, the oil development of Venezuela is a story of absorbing interest. Geology has played a large part. No company has made well locations without some geological study and most of the locations were made after the most careful work.

The first fields brought in were at Mene Grande, Oron and Tara.

Mene Grande was located on a structure which was hard to interpret from the surface but the presence of oil was indicated by innumerable oil seeps.

Oron and Tara were on well defined anticlines with abundant outcrops to show the structure.

The first well at Petroleo in Perija was drilled near a fault and was a producer although the field was not developed owing to legal difficulties.

At El Mene the structure was confused by considerable faulting and the field was discovered only after several wells were drilled.

These first fields were located on clear surface evidence.

The discovery well at La Rosa was lolocated on rather sketchy dips and small seeps and did not look promising as many places which have since proved dusters.

The La Paz and Concepcion fields were located on structures worked out by digging many test pits.

The recent discoveries in Falcon at Uramaco and El Mene del Salto are reported to be located on clearly defined anticlines.

A few untested localities remain where the outcrops indicate a structure favorable for oil accumulation. Other large areas in the Maracaibo Basin are covered by recent alluvials and test drilling of shallow holes is being resorted to to try and determine the structure before deep drilling.

The Maracaibo Basin has already proved a rich oil region, it is being intensely prospected and doubtless many other fields will be discovered there, but other parts of Venezuela have great oil possibilities and look as promising as did the Maracaibo Basin in 1912.

The Orinoca Valley north of the river will in time, I firmly believe, prove a greater oil producer than the Maracaibo Basin. It is many times the size of the Maracaibo region. It is a great plain of sedimentary rock for the most part showing little or no metamorphism and but slightly disturbed. The outcrops along the rim of the valley lead us to believe that the country is underlain by the Eocene and Cretaceous, the source beds of the petroleum in northern South America. Oil seeps occur where the strata are turned up against the mountains and gas seeps of considerable size have been located in the plains.

It is true that the wells so far have found nothing but very heavy oil, but only a minute area in the northeastern part of this vast area has ever been tested.

The great difficulty is that recent formations blanket much of the region and the geologist has little to go on to make a location.

The major oil companies have taken up extensive concessions and have large forces of geologists and engineers studying the ground.

It may be that geo-physical methods will prove advantageous here in locating structure, test drilling with small portable core drills may be the solution, or more likely careful geological work will reveal the favorable points, but in one way or another this great area will be tested and will prove a great reserve of the oil resources of the world.

The Lagunillas field was brought in by the Gulf on a Venezuelan Petroleum Company lease during May and in December the field had a production of 16,252 barrels per day. The discovery well was finished at a depth of 3,500 feet and is still producing at the rate of about 4,000 barrels daily.

In August the Gulf finished Unity No. 1 off Punta Benitez on a Maxudian Petroleum Corporation lease at a depth of 2375 feet, reported as an 8,000 barrel well, now making about 2,500 barrels. Other offset producers are reported on the Creole and Lago concessions.

These two discoveries along with the Ambrosia and La Rosa field prove a tract along the lake shore which has every indication of becoming one of the great oil fields.

In the central part of the State of Falcon in the District of Buchivacoa the Standard (New Jersey) at La Danta brought in a gas well spraying oil at a depth of about 4,000 feet. This well was lost owing to casing trouble, but the showing may lead to the discovery of a new field in the neighborhood.

The Standard of California in conjunction with the Beacon-Sun Company had a good show of oil with gas at a depth of 3,400 feet in their well at Urumaco, District of Democracia, State of Falcon. This well subsequently caught fire and burned for some time. It looks like the discovery well of an important field. This well is specially interesting as it is the first giving a good show of light oil outside of the Maracaibo Basin.

Another important discovery was made by the North Venezuelan Petroleum Company in its well at El Mene del Salta in the district of Acosta, State of Falcon. A 200-barrel show of light oil is reported at a depth of 2200 feet.

The only other notable showing reported from the wildcats is the Sibucara well, about five miles north-west of Maracaibo where the Venezuelan Oil Concession well has a good showing of light oil at about 2,000 feet.

OIL development in Venezuela during 1926 was noteworthy in many respects.

The reported total production of the country increased from 20,912,600 barrels in 1925 to 37,238,532 barrels in 1926, which makes Venezuela now the fourth oil producing country of the world. This increased production was due almost entirely to the development of the oil fields. The discoveries made during the year had not had time to be brought into large production.

During December the production was at the rate of 131,000 barrels per day, and it seems probable that this year will show a larger increase than last year.

About forty wildcat wells were drilling during the year which resulted in the discovery of two new fields which are now shipping and the indication of the probability of four others.

Progress of New Development.

The Standard Oil Company (New Jersey) abandoned three wells testing structures in Central Buchivacoa, State of Falcon, and one in Eastern Buchivacoa. It now has one well drilling in Eastern Buchivacoa and two in Central Buchivacoa.

The Atlantic Refining Company has drilled nine wells, testing structures, in the District of Mara, State of Zulia and is soon expected to start a deep test.

The Pure Oil is drilling at a depth of 4,500 feet in Miranda, State of Zulia.

The British Controlled Oilfields ex-

(Continued on page 208)

Venezuela—Well Chart—Shipping Fields

COMPANY—	FIELD—	PRODUCING WELLS: Completed to January 1	Completed in December	Producing	WELLS JANUARY 1: Drilling	Preparing	Standing or Working over
Caribbean Pet.	Mene Grande	93	3	53	5	..	40
B. C. O., Ltd.	El Mene	106	1	89	5	..	17
V. O. C.	La Rosa	100	10	87	7	..	13
V. O. C.	Concepcion	43	1	38	5	..	5
V. O. C.	La Paz	20	..	16	4	..	4
V. O. C.	Lagunillas	3	2	3	1	3	..
V. O. C.	Benitez	..	..	..	..	..	..
V. O. C.	Ambrosio	..	..	..	2	..	..
Lago	La Rosa	53	..	26	3	1	27
Lago	Ambrosio	10	1	8	..	2	2
Lago	Lagunillas	2	1	2	3	2	..
Lago	Benitez	1	1	1	1	2	..
Lago-Maxudian	Benitez	2	1	2	..	..	..
Gulf-Creole	La Rosa	42	..	31	4	1	11
Gulf-Creole	Lagunillas	2	1	2	1	..	..
Gulf-Creole	Benitez	1	..	1	3	3	..
Gulf	La Rosa	2	..	2	1	..	1
Gulf	Ambrosio	15	3	14	4	..	..
Gulf Ven. Pet.	Lagunillas	1	..	1	3	1	..
General Asphalt	Guanoco	6	..	6	..	..	..
		502	25	382	52	15	120

Venezuela—Production—Shipments

By Companies. Barrels, 42 Gallons.—Partly Estimated.

Company—	PRODUCTION: December	Per Day	November	Per Day	SHIPMENTS: December	Per Day	November	Per day
V. O. C.	1,569,043	50,614	1,396,400	46,547	1,012,300	32,655	1,159,600	38,653
Gulf-Creole	566,000	18,258	515,000	17,167	437,600	14,116	463,600	15,453
Gulf	260,900	8,416	211,000	7,033	233,480	7,532	186,600	6,200
Gulf. Ven. Pet.	113,000	3,645	117,000	3,900	95,520	3,082	107,300	3,577
Lago	627,600	20,245	550,600	18,353	445,500	14,371	538,700	17,957
Lago-Maxudian	76,000	2,452	.....	.....	76,000	2,452	.....	.....
Carribbean Pet.	576,600	18,600	616,500	20,550	480,000	15,484	557,800	18,593
B. C. O. Ltd.	239,130	7,714	221,900	7,395	207,270	6,686	196,600	6,553
General Asphalt	60,000	1,935	58,000	1,933	60,000	1,935	58,000	1,933
Totals	4,088,273	131,880	3,686,400	122,880	3,047,670	98,313	3,268,200	108,940

Total Production:—V. O. C. 1,569,043; Gulf, 939,900; Lago, 703,600; Caribbean Pet., 576,600; B. C. O. L 239,130; General Asphalt, 60,000.

Venezuela—Production—Shipments

By Fields, Barrels, 42 Gallons.—Partly Estimated.

Field—	PRODUCTION: December	Per Day	November	Per Day	SHIPMENTS: December	Per Day	November	Per Day
La Rosa	2,252,569	72,664	2,141,000	71,366	1,664,210	53,684	1,881,100	62,703
Mene Grande	576,600	18,600	616,500	20,550	480,000	15,484	557,800	18,503
Lagunillas	503,800	16,252	336,600	11,220	258,370	8,335	296,500	9,883
Ambrosio	171,100	5,519	163,200	5,440	126,820	4,091	144,500	4,817
El Mene	239,130	7,714	221,900	7,396	207,270	6,686	196,600	6,553
Benitez	108,900	3,513	.....	.....	101,000	3,258	.....	.....
La Paz	105,600	3,406	89,500	2,983	90,100	2,906	80,220	2,674
Concepcion	70,574	2,277	59,700	1,990	59,900	1,932	53,480	1,783
Guanoco	60,000	1,935	58,000	1,933	60,000	1,935	58,000	1,933
Totals	4,088,273	131,880	3,686,400	122,878	3,047,670	98,313	3,268,200	108,940

Venezuelan Companies

The folloiwng were the principal oil companies active in Venezuela during the year:

The Royal Dutch Shell Group who controlled the Caribbean, the Venezuelan Oil Concessions Ltd. and the Colon Development.

The General Asphalt Company

The Lago Petroleum Company (Pan-American).

The Standard Oil Company of Venezuela (Standard Oil Company of New Jersey).

The Richmond Petroleum Company (Standard Oil Company of California.)

American Maracaibo.

Omnium Oil Development Company, Ltd.

New England Oil Corporation.

Venezuelan Holding Corporation.

Gulf Oil Corporation.

Venezuelan Sun Ltd. (Sun Oil Company and Beacon Oil Company).

Orinoco Oil Company (Pure Oil Company).

Atlantic Refining Company.

Maxudian Petroleum Corporation.

Venezuelan Petroleum Company.

Compania Venezolano de Petroleo.

Creole Syndicate.

Pantepec Petroleum Company.

British Controlled Oilfields, Ltd.

North Venezuelan Petroleum Company (Central Mining Company).

Venezuela Gulf Oil Company.

Maracaibo Oil Exploration.

During 1926 the Union Oil Company of California, Sinclair, Amerada and Mexican Seaboard Companies joined this group by acquiring extensive holdings which they are now geologizing. The Texas Company is no longer active in Venezuela.

Statistical data taken from "O'Shaughnessy's South American Oil Reports."

Climbing Production At Seminole Presages Shut Down

Daily average output of the field nears 300,000 barrels; producers meet to confer on curtailment

By ROYE C. MUNSELL
Staff Representative

Tulsa.—With production from the greater Seminole field climbing to 300,000 barrels daily there are rumors of another shutdown agreement. As this is being written on Monday, a meeting of the field operators has been scheduled for Tuesday in Tulsa, Oklahoma. At that time definite action one way or the other will be taken, no doubt.

During the week just ended the field reached a peak of more than 288,000 barrels daily and maintained an average daily output of around 285,000 barrels. The actual pipe line capacity of the field is 249,000 barrels. The Oklahoma Pipe Line Company has a proposed 10-inch line from the field, but work has not yet started, and it cannot be in operation for several months. Outlet facilities will be augmented only slightly by the lateral with which Prairie Oil & Gas Company is extending its gathering system into township 8-6, the new I. T. I. O. pool.

Virtually all of the major operators in the field are affiliated with a pipe line operating company or own their own lines. The few operators not so fortunately situated, however, are having some little difficulty in getting an adequate outlet for their oil.

Much new steel storage is being put up but work has been hindered by weather conditions. Due to recent rains the roads make heavy hauling very difficult.

Accurate information from the field is hard to secure due to the inaccessibility of some of the parts, but it is estimated that there is at present 750,000 barrels of steel storage unfilled. With production at its present level some 70,000 barrels are being run to storage daily. Considering the probability of increasing production, the situation is apparently more serious than might appear at first glance.

It is more than probable that if no restrictions are put on the field and operations are continued at the present rate, the field's production will exceed 400,000 barrels daily in a short time.

There are at present 462 wells drilling in the field, with a large number due for completion in rapid succession, particularly in the Earlsboro district. With the completion of the second Wilcox sand producer there it appears that this area will be as rich as that found in the Seminole City pool proper in township 9-6.

The second deep producer in the Earlsboro district in township 9-5, the Amerada Petroleum Corporation, Anderson 2, southwest corner NW NW 15-9-5, made 9600 barrels initial and is now producing 8000 barrels daily. This well found the sand slightly higher than the discovery well which was drilled one location to the north. This second well is the forerunner of several other completions in that vicinity, as there are many wells nearing the sand. Rapid development of the Earlsboro district is very much under way.

The wildcat well being drilled west of the Garber field by the Roxana Petroluem Corporation and the Skelly Oil Company which has a show below 6100 feet probably will not be completed as a producer since production such as it is cannot be made commercially profitable from that depth. The well as this is being written is making five barrels an hour from 6133-53 feet, and also considerable gas.

This well is tremendously significant as a marker since it, shows that oil does exist below 6000 feet in the Mid-Continent and may be found in paying quantities in another part of thta locality.

Marland Bill Opponents Probably Have Killed Chance for Oklahoma Production Law Change

Tulsa.— If any change is made in Oklahoma conservation statutes by the present legislature, it promises to come through the amendment of existing measures, rather than through the adoption of new laws. This situation is the outgrowth of an open hearing on the Marland bill before the joint committees on oil and gas of the two branches of the Oklahoma legislature in Oklahoma City, February 9.

The committees have announced that no action will be taken on the Marland bill, pending a report from a special committee of the Kansas-Oklahoma Division of the Mid-Continent Oil & Gas Association, as to the advisability of amendments to existing statutes on oil and gas conservation in Oklahoma.

Proponents of the Marland bill have not announced abandonment of the measure. But the general impression is that both proponents and opponents of the measure will come together on this committee to make a report on amendments to existing laws. Only in case of disagreement in this recommendation is it likely that the Marland bill will be further advocated before the present session.

The special committee named by Henry McGraw, president of the Kansas-Oklahoma Division of the Mid-Continent Oil & Gas Association to make the study of existing laws and possibilities of amendments is composed of J. C. Denton, Mid-Continent Petroleum Corporation, Tulsa, chairman; E. H. Chandler, Sinclair Oil & Gas Company, Tulsa; James B. Diggs, Gypsy Oil Company, Tulsa; John H. Kane, Phillipps Petroleum Co., Bartlesville; D. A. Richardson, Marland Oil Company, Ponca City; James A. Veasey, Carter Oil Company, Tulsa; W. C. Franklin, Tidal Oil Company, Tulsa; J. H. Hill, The Texas Company, Tulsa; Wirt Franklin, Ardmore; W. P. Z German, Skelly Oil Company, Tulsa; T. J. Flannelly, Prairie Oil & Gas Company, Independence, Kansas; George S. Ramsey, Ramsey, De Meules & Martin, Tulsa.

The committee will meet at the call of the chairman. It will make some sort of report, which in turn will be presented to the legislative committees. Whether this report will recommend amendments, or whether it will recommend that the existing statutes be left unchanged is a matter for its deliberations.

D. A. Richardson, attorney of the Marland Oil Company, is responsible for the Marland measure being pushed as far as it was with the legislature and with the oil industry. Together with C. C. Brown, a vice president of the Marland Oil Company, he carried the fight for the measure to the point of the open committee hearing.

Finally, however, proponents of the measure agreed to some amendments, one of which would have exempted old oil pools from all provisions of the measure. Then it was brought out that the amendment of present statutes could accomplish as much as the Marland measure, thus changed. The upshot was the decision of the legislative committees to withhold action until the special committee could make a study of existing statutes and reports.

Digest of A. I. M. E. Production Symposium for 1926

THROUGH a series of technical papers read before the Petroleum Division of the American Institute of Mining and Metallurgical Engineers, at the New York meeting this week, complete statistics covering the petroleum industry for 1926 were presented. Inasmuch as the papers were all prepared by petroleum experts, men intimately associated with the industry, the information is perhaps as authoritative as can be found.

Not only do these papers present figures on production and field development for the past year, but they also point out many trends of mechanical development of major importance to the industry.

Geological developments of significance are stressed, as well as new discoveries in both wildcat and proven territory.

The papers have more value than mere statistical documents inasmuch as they treat statistics from the standpoint of petroleum economics, bringing out the relative importance of the different districts that produce oil when considered as a unit.

Through the detailed information that each author gives on his particular section or field, a good clue is obtained as to where prospective development for the coming year is to be. Thus each paper is in a sense a summary and forecast combined.

Due to their length all the papers have been briefed, but the essentials of each are here presented.

Oil Produced in Texas During 1926, Exclusive of the Gulf Coast District

By R. B. WHITEHEAD

R. B. WHITEHEAD covers Texas outside the Gulf Coast in his paper "Oil Produced in Texas During 1926, Exclusive of the Gulf Coast District."

He gives the total output of the district under discussion 126,774,952 barrels. The total number of new pools discovered was 46. According to his estimates, this production represents a gain of approximately 7,500,000 barrels over 1925, and approximately 19,500,000 barrel as compared with 1924.

For lack of a better classification, Mr. Whitehead has divided Texas, exclusive of the Gulf Coast, as follows:

North Central Texas, which includes the producing areas in Brown, Callahan, Coleman, Comanche, Eastland, Shackelford, Stephens and Palo Pinto Counties; Central Red River, including Archer, Baylor, Clay, Cooke, Jack, Montague, Throckmorton, Wichita and Wilbarger Counties; the Texas Panhandle area; the East Texas fault line zone, including the San Antonio District, Luling and Powell; West Texas and Southwest Texas or the Laredo District.

The North Central Texas Division has maintained an average monthly production for the year 1926, of 1,376,088 barrels from approximately 5,912 wells. Total production for the division was 15,274,282 barrels.

Production is obtained from a wide range of depth, which can be classified for the most part, as two general types, viz., the "shallow sands" of Cisco and Canyon series and the "deep pay" of the Strawn and Bend Lime.

In Brown County, continued and added interest has been manifested particularly by the independent operators in the further development and discovery of shallow production. Here the extensions of the Cross Cut Pool and the discovery of the Fry, Eades and White pools, stimulated drilling throughout western Brown and eastern Coleman Counties.

Initial yields of 1400 barrels of 42 gravity oil from a depth of 1340 feet, as was the case in the Fry pool and its extensions, soon developed a demand for close in acreage.

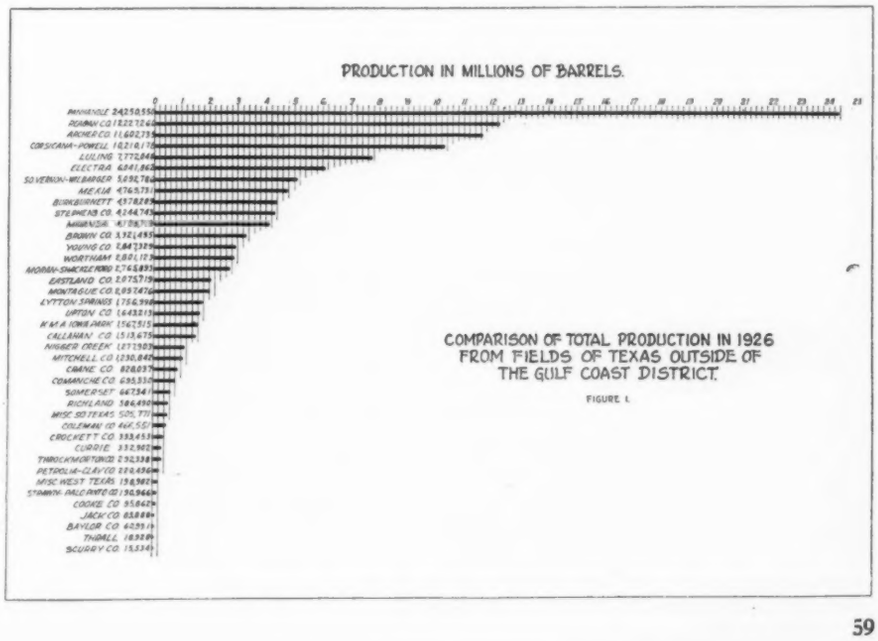
In Stephens County, the major portion of the production is coming from the Strawn and Bend series. The Strawn Production is obtained from the upper portion of the series at depths of 1800 and 2300 feet. The Bend Lime production is coming from the top of this series at a depth of 3200 feet and 3700 feet.

The discovery of a new pool near Lacasa in the Strawn series at a depth of 2000 feet is probably the forerunner of several more pools of this type.

Eastland County production may be classed with that of Stephens. Two new "Ranger sand" areas have been developed from a depth of approximately 3480 feet, one, six miles southeast from Ranger, known as the Gholson area, the other, located southeast of Lee Ray about two miles. Production from these two discovery wells has held up exceptionally well.

In Shackelford County the Cook Ranch pool near Albany has been the outstanding discovery of the year. Production of 40 degree gravity oil at a depth of approximately 1250 feet from the basal Cisco series stimulated a drilling campaign in the northern half of this county.

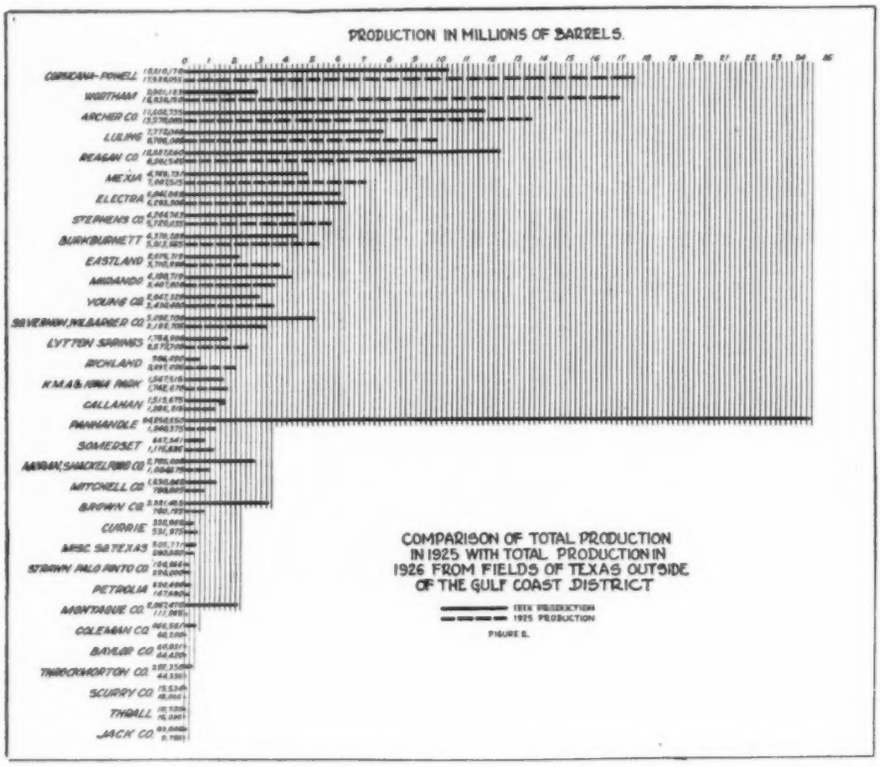
Callahan County developments centered around the discovery of a shallow pool near Baird which is producing from a sand in the lower Cisco at a depth of 600 feet. This pool closed the



COMPARISON OF TOTAL PRODUCTION IN 1926 FROM FIELDS OF TEXAS OUTSIDE OF THE GULF COAST DISTRICT.

FIGURE 1.

A. I. M. E. PRODUCTION SYMPOSIUM FOR 1926



year with an average daily production of 3000 barrels.

The outstanding development in this country has been the development and extension of the Cross Plains pool in the extreme southeast portion of the county.

Coleman County closed the year with a total of ten small pools; 103 producing wells, with an average monthly production of 38,880 barrels of oil.

Central Red River District

The discovery of 22 new pools in this division, which for the most part are producing from shallow depths, not to exceed 1800 feet, helped materially in establishing a high comparative daily well average for this district of 8.1 barrels.

The general trend of activities moved southward from the older fields during the year, southern Archer and northern Young Counties receiving the major part of the new drilling.

Panhandle of Texas

This division included those producing areas in Hutchinson, Carson, Gray, Wheeler and Potter Counties.

In these counties 683 wells were completed during the year 1926, of which 30 were dry holes. This area had an average total daily production of 2100 barrels during January, which increased to 159,190 barrels daily for December, 1926.

In the Panhandle district of Texas two new areas have been developed to the eastward from the area of production during 1925. The Pampa producing area in Gray County is probably one of the striking examples of this eastward trend of development.

Two producing zones are being developed in the Panhandle area, viz., the lime series and granite wash. These two zones parallel each other and flank the gas producing area.

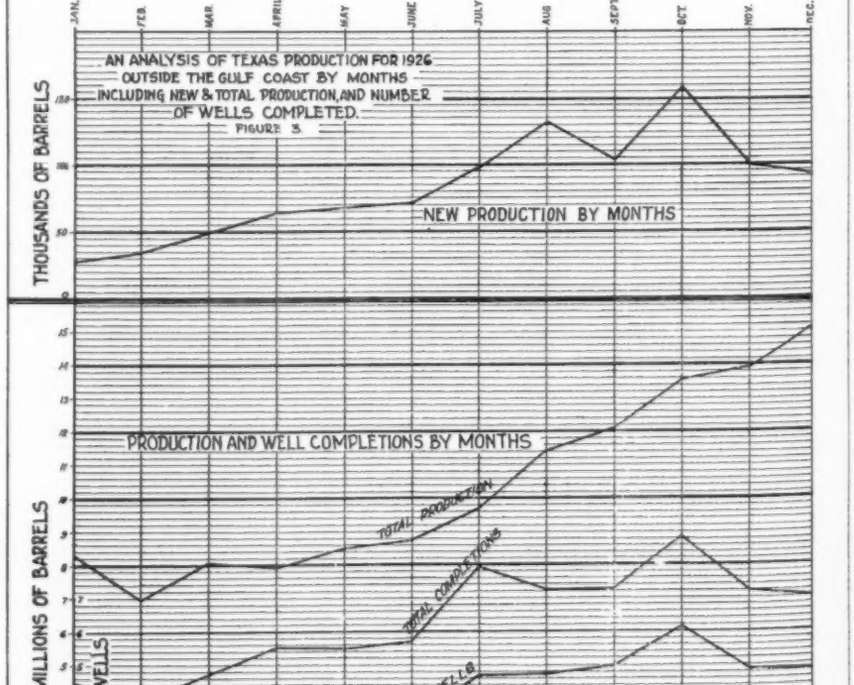
It is very likely that the south flank of the present producing Panhandle trend will receive considerable development during 1927.

South of the Panhandle trend, at least two regional trends running somewhat parallel to the present Panhandle trend are undergoing exploratory drilling, and the year 1927 should see the successful completion of one or more areas along these structural trends.

The potentialities of the present Panhandle areas are enormous. Prophecies have been made relative to the reserve oil now available from the present proven areas and the range of these estimates vary from 800 million to one billion barrels.

East Texas Fault Zone

The Balcones Fault line system, which includes the Luling District, San Antonio District and the Mexia-Powell pools was comparatively dormant during the year. Seventy wells were drilled north of the Luling Pool along several fault lines in search for another pool of Edwards lime production. This development extended well into Bastrop County, but the close of the year revealed no new pools or gave much hope



A. I. M. E. PRODUCTION SYMPOSIUM FOR 1926

for the discovery of another pool similar to Luling either north or south of the present producing area. Several small wells were developed in the Austin chalk and shows of oil were encountered in Serpentine, but nothing of importance has been developed which would warrant the prophecy for another lime field. However, several likely looking areas for Serpentine production are at present receiving consideration.

In the Mexia-Powell fault zone, the Nigger Creek field has been the only new pool discovered in the Woodbine sand zone during the year 1926. This pool is located on a parallel fault line to the present producing Mexia-Powell fault and has renewed the interest of operators in endeavoring to discover another Woodbine pool west of the present line of productin and parallel to the same. The Nigger Creek pool has been defined and is to be compared in importance with the Richland Field of this group. The year 1926 has witnessed the starting of four deep tests in the Trinity sand series below the Woodbine where production can be expected at a depth of approximately 5500 feet. These tests are well positioned with reference to the fault line and will serve as regional tests from Kosse to Powell.

West Texas

The West Texas division which includes the producing areas in Crane, Upton, Reagan, Winkler and Jones Counties, has been in the limelight during the year 1926. Here seven new pools were developed during the year, which for the most part, are producing from the Big Lime series of West Texas, similar to the producing horizon in the Big Lake pool, the production being encountered within a range of 300 feet below the top of the Big Lime. None of these pools have been defined by the close of the year, but are considered to be the forerunners of sizeable producing areas. These pools are being developed on major structural trends which run in general in a northwest-southwest direction somewhat parallel to the Panhandle trend of production.

Southwest Texas

There has been a marked extension in all the fields in Duval, Webb, Jim Hogg and Zapata Counties. The new discoveries are as follows; the Carolina-Texas pool by the Associated Oil Company, the Cole pool by the Cintex Petroleum Company, the O'Hern-Seacord pool, the Alworth Bros. pool and the Simms pool.

Operations in the Gulf Coast of Texas and Louisiana

By SIDNEY A. JUDSON

SIDNEY A. JUDSON, geologist, Humphreys Corporation, details developments in the Texas and Louisiana Gulf Coast in his paper called "Operations in the Gulf Coast of Texas and Louisiana," Mr. Judson's work is of special interest in that it brings out interesting facts connected with discoveries made through the use of geophysical instruments.

His paper follows:

The total production for the Gulf Coast for 1926 was 48,885,515 barrels, being 17,902,355 barrels more than in 1925. Of this total Texas produced 43,196,217 barrels and Louisiana produced 5,689,298 barrels. This increase was largely due to the development of the gusher production at Spindle Top, aided by many other fields obtaining smaller extensions. Comparative production by fields is shown on the accompanying graph. Initial production was added in the amount of 670,400 barrels.

Three new salt domes were located within the year by geophysical methods, and the presence of cap rock on these was proved by drilling. Cap rock was hit on one salt dome already foretold in 1925 by the torsion balance.

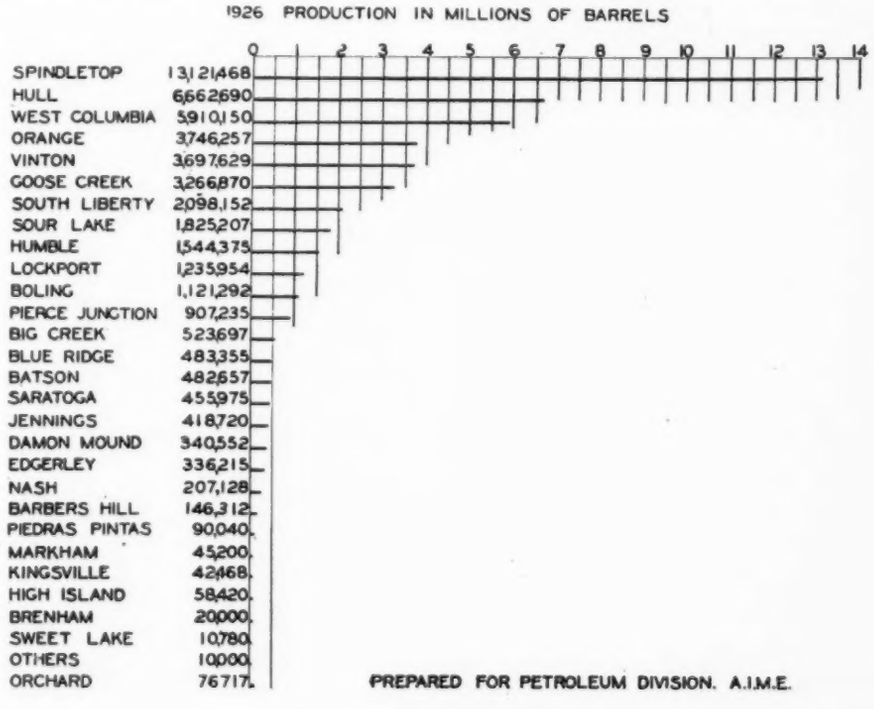
A total of 1011 tests were drilled during 1926, of which 615 or 61 per cent were oil wells; 41 or 4 per cent were gas wells and 355 or 35 per cent were dry holes.

Two fields in Texas and three in Louisiana obtained commercial production for the first time. New flank pools were discovered or previous pools were extended on eleven producing fields in Texas and one in Louisiana. One gas field in Texas secured important development.

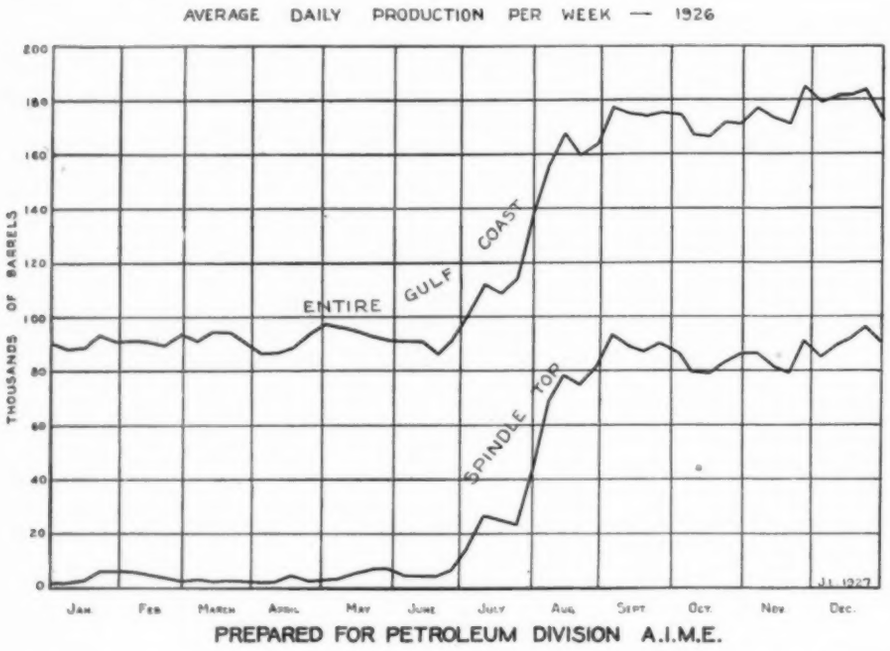
The discoveries of 1926 bring the number of salt domes in the Gulf Coast of Texas to a total of thirty-five; eight of which have been discovered by geophysical methods. There are also three oil fields and three gas fields of structural type. The Gulf Coast of Louisiana is credited with 17 salt domes, two of which have been located by the aid of the seismograph. In addition it has four oil fields and one gas field of probable structural type.

Clemens Salt Dome

Clemens dome is located in Brazoria County, Texas, about four miles northwest of the Allen Salt Dome. Torsion Balances operated by the Roxana Petroleum Company indicated in 1925 the presence of the salt dome. The Roxana Petroleum Kropp No. 1 hit cap rock at 584 feet March 6, 1926, proving the salt dome. Seven wells have been completed without finding commercial production and three more are drilling, although considerable oil was bailed from Kropp No. 2. The testing of this dome is exceptional, in that the Roxana Clemens No. 1 was drilled with the guidance of torsion balance data before the Kropp No. 1 had proved the presence of a dome. Later drilling to the cap showed this test to be favorably lo-



A. I. M. E. PRODUCTION SYMPOSIUM FOR 1926



cated with reference to the edge of the dome.

Moss Bluff Salt Dome

Moss Bluff dome is located in Liberty County, Texas, about ten miles southeast of the South Liberty Salt Dome. The approximate outline of this dome was determined about June 1, 1926 by seismograph used by the Gulf Production Company. As soon as the Gulf started its leasing program, seismographs of at least four companies checked the presence of this salt dome and a rapid leasing campaign ensued, with prices nearly equivalent to those on a dome already proved by drilling. In November the Union Sulphur Company, drilling a test for sulphur in the northeast corner of the Sun Oil Company's Kyle oil lease, proved the presence of this dome when the cap rock was hit at 835 feet. A second test now drilling 3300 feet west hit cap rock at 674 feet. About two miles to the southwest a dry hole drilled to 5015 feet failed to encounter dome material.

Feusse Pointe Salt Dome

Feusse Pointe dome is situated about six miles east of Loreauville, Iberia Parish, Louisiana. It was indicated by seismograph by the Gulf Production Company. The presence of dome material was proven early in November, 1926, by the Union Sulphur Company drilling in Section 26-11-8e, when it penetrated salt at 1394 feet. A 600 barrel producer was later made in this test from sand between 1100 and 1180 feet. The discovery of oil in this dome in the first test is a striking exception to the considerable period of time and the many wells that have been required to find production on other domes located by geophysical methods.

Napoleonville Salt Dome

Napoleonville dome is located 10 miles southwest of Donaldsonville, Assumption Parish, Louisiana. It was indicated by seismograph methods in the autumn of 1926. This dome was leased up with strong competitive buying in the major companies. The Union Sulphur Company Clifton No. 1 proved the presence of dome material here in December, 1926, when it drilled into cap rock at a depth of 450 feet. This test is located in the southeast quarter of Section 41-12s-13e.

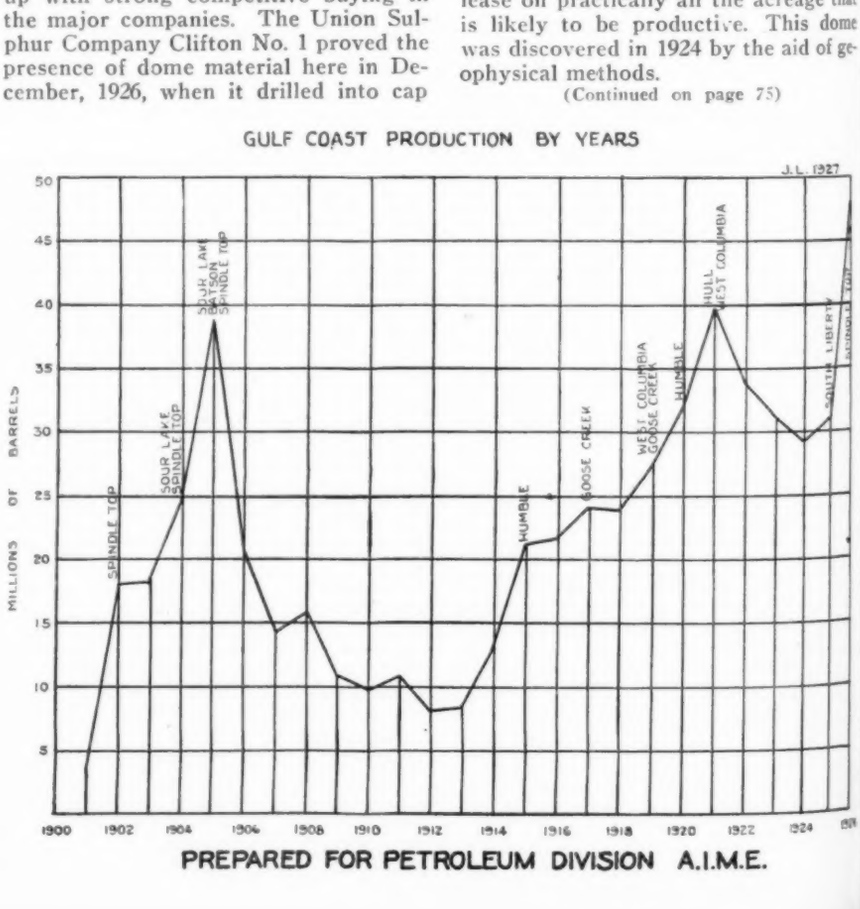
Nash Salt Dome

Flank production was discovered January 3, 1926 on the Nash dome by Rycade Oil Corporation in their Nash 5 from a total depth of 4127 feet. This well is located on the southeast flank and had an initial flow of 500 barrels of 20.5 degrees Baume oil. Eight tests were drilled on this flank, of which six were oil wells with initial production from 175 to 2500 barrels. On the southwest flank about one mile from the discovery well, four producers were obtained from an average depth of 4300 feet, with average initial flow of about 1000 barrels. Neither of these areas are as yet defined in the trend along the dome. All the acreages on this dome is leased by the Rycade Oil Corporation.

Orchard Salt Dome

Production on Orchard dome was established in January, 1926, by the completion of the Gulf Production Company Moore 5. This well is located on the east flank, and had an initial flow of 2000 barrels of 34 gravity oil from a total depth of 3750 feet. One additional producer and two dry holes have been drilled since the completion of the discovery well. This dome has been outlined by drilling on only one flank. The Gulf Production Company owns the lease on practically all the acreage that is likely to be productive. This dome was discovered in 1924 by the aid of geophysical methods.

(Continued on page 75)



Texas Well Average Raised During Last Half 1926

Check shows 26,575 producers have total output of 596,758 barrels daily, Panhandle district has highest average

By WALLACE DAVIS and H. H. KING
Staff Representatives

TEXAS fields had 26,577 wells producing during December, 1926, with an average per well of 22.45 barrels. The daily average for Texas during December was 596,758 barrels. These figures give an idea of the status of fields of the state when a comparison with well production for June, 1926, shows a gain of 5.94 barrels per well since that time. During June there were 23,951 wells producing in Texas with a well average of 16.51 barrels per well.

The increase in well average for the State comes primarily from the Gulf Coast territory, Panhandle district and West Texas. While in the two latter districts wells are not showing as high averages per field generally as six months ago, there are many more wells added which have an average falling slightly under the June averages, thus giving better averages to larger numbers of wells. In the Gulf Coastal section Spindle Top's average rose from 33.34 barrels per well to 376.08 barrels. A factor which went with Spindle Top's phenomenal gain during the last half of the year was a spectacular increase in the majority of Coastal fields due to workover wells. Several old wells have been abandoned during that time, thereby taking small producers of a barrel or slightly more off the production list, while many small producers on record during June were improved to more than 100 per cent better wells. Introduction of electric power for pumping in Coastal fields and increased use of air lift have been instrumental in raising the well average for a number of the fields.

Aside from the gain resulting from improved production methods in the Gulf Coast, there was an increase in field activity generally to increase the well average. As an example of this activity the well average of Blue Ridge field climbed from 53 to 155 barrels by the addition of six wells, Big Creek from 80 to 123 barrels per well by the addition of nine wells, Pierce Junction from 122 to 235 barrels by the addition of less than a dozen wells, considering abandoned wells deducted, and an increase of from 88 to 102 barrels per well at Boling with the same number of producers. The well average at Humble was increased from 15 to 25 and at West Columbia from 75 to 89 barrels due to improving of production methods.

Southwest Texas fields contributed considerably to the gain per well during the last half of the year with a total of 1,647 producers during December making 11.80 barrels per well as compared with 1353 wells during June, 1926, making an average of 7.73 barrels. The bulk of this increase comes from a rush of drilling activity in the Laredo district during the latter part of 1926, which served to raise the district's daily production run from around 8000 barrels to 16,300 barrels in December.

In the South Central fault district there were 1262 wells during December with a well average of 17.13 barrels. Luling field, with 520 wells producing an average of 35.07 barrels per well was responsible for this gain being as good as it stands. In this division is found the State's lowest production average, with Rockdale-Minerva pool showing a well average of .65 barrels from 390 wells.

Lower Mid-Continent

The portion of Texas generally identified as the lower end of the Mid-Continent district, and embracing all oil fields between the Mexia-Corsicana district on the east and the Crane-Upton-Winkler County fields on the west was averaging 17.97 barrels per well during the last month of 1926. The total number of pumping and flowing wells in the lower Mid-Continent at the close of December amounted to 21,761, and the daily average production for all these wells aggregated 391,201 barrels.

The Mid-Continent district in Texas consists of the Panhandle, North Texas, Central West Texas, West Texas and the East Central Texas fault zone. Of these five districts, only the North Texas and Central West Texas areas are linked. All fields in these districts are on the Mid-Continent crude price schedule, or have prices based on same.

The Texas Panhandle district held the lead with a comfortable margin on the daily output per well during December, due to the presence of a large amount of semi-flush production in Hutchinson, Gray, Carson and Wheeler Counties. The Panhandle maintained a daily average of 135,469 barrels during December from 786 flowing and pumping wells, or an average of 172.35 barrels daily per well.

The West Texas district occupied second place on daily yield per well with an average of 109.59 barrels daily. This district, which also included the Big Lake field, was credited with 522 oil producers with a combined daily output of 57,210 barrels, with considerable flush oil represented by the newly developed fields in Crane and Upton Counties. Although the Big Lake field, Reagan County, is soon to close its fourth year of production, it offered a daily output of 182.75 barrels per well during the last month of 1926, with 160 producing wells on the active list. Crane and Upton Counties, which have producing areas straddling the county line, averaged 109.97 barrels daily per well during December, with 192 active producers, of which a number can be classed as semi-flush. The Gulf-McElroy field, which straddles the Crane-Upton County line, averaged 549.66 barrels daily per well during December from nine flowing wells, and offered a potential yield considerably above this amount, if pipe line and storage facilities had been available.

Mitchell County, which is the oldest oil producing area in West Texas, is maintaining a comparatively straight production curve on crude yield per well, and during December averaged 33.22 barrels daily per well, with 107 pumpers listed.

Fault Region

The East Central Texas fault region offered a daily yield of 25.78 barrels per well, with the Nigger Creek field, which is the latest addition to the district, averaging 97.5 barrels daily per well. The Mexia field, veteran oil producing area in the district, clings to second place on well average with a daily yield of 26.66 barrels per well, while the Corsicana-Powell field averaged 24.33 barrels. A number of shallow oil producers are included in the production of the Corsicana-Powell field, having been drilled after the development of big flush production in the Woodbine sand. The fault zone was credited with a daily average production of 45,505 barrels from 1765 pumpers during the last month of 1926.

The development of flush production from shallow oil sand horizons in Brown and Shackelford Counties during the last half of 1926 materially increased production in the Central West Texas high gravity oil district. During December, this district was credited with a total of 6,431 pumping and flowing wells, having a daily yield of 8.55 barrels per well, Brown County topped the list of counties in the district with a daily yield of 16.26 barrels per well, while Shackelford County followed next with a daily recovery of 13.79 barrels per well. Callahan County's so-called grass root fields, named because of the shallow depths of most of the producers, has a total of 1514 pumpers, which averaged 3.43 barrels daily per well during December. Stephens County, which has mostly deep lime producers, averaged 7.40 barrels per well daily during the same period, with 1357 producers on the active list.

Wichita County continues to retain its

lead as the most drilled up county in the State, and the average yield per well daily during December amounted to 4.38 barrels, with 7250 pumpers listed on the active report. These wells represent the Burkburnett, Electra, K-M-A and Iowa Park fields' total producers, with the former field furnishing the most. Archer County occupies second place in the North Texas district on the total number of pumpers, and during the last month of 1926 had 2877 active wells making a daily average of 10.27 barrels per well, indicating a better yield than the county to the north. Young County, which has deep production on the south end and shallow production in the upper part of the county, averaged 9.85 barrels daily per well during December, with 803 active producers. The South Vernon district, Wilbarger County, finished the year with 547 producers, having a daily yield of 23.45 barrels per well. The Nocona shallow field in upper Montague County ranks high on daily yield per well, and averaged 33.29 barrels per well during December, with 357 pumpers on the active report. The bulk of this production is low gravity oil.

Well Averages

The daily average production per well during the month of December, 1926, with the total number of wells and daily production by fields follows:

NORTH TEXAS DISTRICT

	No. Wells	Daily Av. Prod. per Field	Well Av. Per day in Bbls.
Archer County	2,877	29,555	10.27
Baylor County	21	139	6.62
Clay County	321	820	2.55
Cooke County	43	810	18.84
Jack County	23	705	30.65
Montague County	357	11,885	33.29
South Vernon	547	12,825	23.45
Throckmorton County	15	1,585	105.66
Wichita County	7,250	31,760	4.38
Young County	803	7,910	9.85
Totals	12,257	97,994	7.99

CENTRAL WEST TEXAS DISTRICT

Brown County	1,043	16,955	16.26
Callahan County	1,514	5,198	3.43
Coleman County	142	1,600	11.26
Desdemona-Comanche	431	1,600	3.71
Palo Pinto County	159	435	2.74
Ranger-Eastland	789	5,460	6.92
Shackelford County	996	13,730	13.79
Stephens County	1,357	10,045	7.40
Totals	6,431	55,023	8.55

EAST CENTRAL TEXAS DISTRICT

Corsicana-Powell	827	20,120	24.33
Currie	52	851	16.37
Mexia	432	11,518	26.66
Nigger Creek	72	7,020	97.50
Richland	103	1,153	11.19
Wortham	279	4,843	17.36
Totals	1,765	45,505	25.78

PANHANDLE DISTRICT

Carson County	64	2,925	45.70
Gray County	85	9,279	109.16
Hutchinson County	623	122,550	196.70
Potter County	1	25	25.00
Wheeler County	13	690	53.07
Totals	786	135,469	172.35

SOUTH CENTRAL FAULT DISTRICT

Chilton-Falls County	3	18	6.00
Brenham	4	105	26.25
Luling	520	18,240	35.07
Lytton Springs-Lockhart	325	2,950	9.07
Minerva-Rockdale	390	255	.65
Thrall-Williamson Co.	20	54	2.70
Totals	1,262	21,622	17.13

Flood of Production Weakens Crude Market

(Continued from page 47)

Atlantic Oil Producing Company forecasts a big output of oil from this area within the next few months, as more than 50 drilling tests, rigs and locations are under way. Pecos County made its bid for attention in crude market circles by registering a 3550 barrel producer from the second test drilled in the Yates field by Mid-Kansas and Transcontinental Oil Company from shallow pay at 999-1002 feet. This is the shallowest oil well in West Texas, and is believed to be on a big structure, with a faulted condition that permitted the trapping of a large reservoir of oil.

Rapid growth of crude production in West Texas fields lately has exceeded local storage and pipe line facilities, and over production is confronting the operators in the area isolated from railroad shipping points, while the Humble Pipe Line Company, which has the only direct line leading out of the district, is accepting considerable more oil than can be put through the line. Humble's eight-inch carrier, with loops, is rated at 40,000 barrels daily, but during cold weather the maximum capacity is 38,000 barrels. About 73 per cent of the capacity of this line is filled with Big Lake crude handled on contract by Humble for the Reagan County Purchasing Company, and Humble has a contract to take a minimum of 5000 barrels daily from Gulf's McElroy property, Crane County, and recently made contract to accept 5000 barrels daily from the Yates property of the Mid-Kansas-Transcontinental, with the latter delivering same to Humble's tank farm at McCamey, which is the Western terminus of the trunk line. Humble made contract in December to take a maximum of 10,000 barrels of West Texas crude from Marland also.

Daily production in the West Texas district is now in excess of 70,000 barrels, without including the output of the recent heavy producers, and a portion of this output is being handled in tank cars by the Southern Crude Oil Purchasing Company, Roxana, Simms Oil Company, and Rio Grande Oil Company, El Paso. Mitchell County's output is being absorbed by a local refinery. Deliveries to Humble lately have outgrown pipe line and tank car shipments from the district and leased all available tankage held by the Reagan County Purchasing Company near the Big Lake field and that held by Marland in the Crane-Upton district has been filled. Increased tank car movement of crude is the only recourse left to Humble, otherwise a general proration of runs from leases not served by contract will follow.

Magnolia has announced that several 55,000 barrels steel tanks will be erected on its property in the Church & Fields area as soon as materials can be assembled. This tankage will be supplemented later by a large tank farm on the Texas & Pacific Railroad, located about 25 miles north of the field, with a connecting line. However, Magnolia will not be in position to handle its own production for 60 days, while in the meantime 12 operations are scheduled by the company in the Church & Fields area, and all can be drilled in within that period.

Gulf is to be in position to handle its own production in the Church and Fields area about March 1, through the completion of an eight-inch line from the McElroy property to tank farm near Midland, where a car rack is being erected. Gulf has a well in the former field capable of doing 120 barrels hourly, if facilities were available for handling the oil. The completion of Gulf's line will release about 3000 barrels room on Humble's Church and Fields - McElroy gathering line, as Humble is exceeding its contract with Gulf by this amount, but the 5000 barrel daily contract will stand.

The McCamey-Hurdle district, located on the Crane-Upton County line, is forging ahead on daily output, with good flowing wells on the southeast end of the structure and production limits yet to be defined.

WEST TEXAS DISTRICT

	No. Wells	Daily Av. Prod. Per Field	Well Av. Per day in Bbls.
Crane-Upton	192	21,115	109.97
Crockett County	29	1,015	35.00
Garza County	1	5	5.00
Howard County	21	740	35.24
Jones County	4	1,160	290.00
Loving County	2	20	10.00
Mitchell County	107	3,555	33.22
Pecos County	1	195	195.00
Reagan County	160	29,240	182.75
Scurry County	4	45	11.25
Winkler County	1	120	120.00
Totals	522	57,210	109.59

GULF COAST

	No. Wells	Field Av.	Well Av.
Barbers Hill	10	277	27.70
Batson	306	1,709	5.58
Big Creek	21	2,588	123.24
Blue Ridge	18	2,802	155.66
Boling	30	3,088	102.93
Damon Mound	38	1,011	28.71
Dayton	5	100	20.00
Goose Creek	87	7,732	88.87
High Island	2	90	45.00
Hull	132	18,646	141.25
Humble	163	4,160	25.52
Markham	6	200	33.33
Nash	8	848	106.00
Orange	73	6,497	87.63
Orchard	1	71	71.00
Pierce Junction	20	4,718	235.90
Saratoga	261	1,157	4.43
Sour Lake	327	5,312	16.24
South Liberty	60	4,332	72.16
Spindle Top	240	90,260	376.08
West Columbia	99	8,897	89.86
Totals	1,907	164,495	86.04

SOUTHWEST TEXAS

Callaham	30	190	6.33
Ina	15	105	7.00
Kingsville	7	445	63.57
Laredo District	692	16,300	23.55
Piedras Pintas	3	480	160.00
Somerset	900	1,920	2.13
Totals	1,647	19,440	11.80

SUMMARY

	No. Wells	Daily Av. Prod for Dist.	Daily Well Av. in Dist.
Texas Gulf Coast	1,907	164,495	86.04
Southwest Texas	1,647	19,440	11.80
North Texas	12,257	97,994	7.99
Central West Texas	6,431	55,023	8.55
East Central Texas	1,765	45,505	25.78
Panhandle District	786	135,469	172.35
West Texas	522	57,210	109.59
South Central Texas	1,262	21,622	17.13
Totals	26,577	596,758	22.45

Prospects Indicate New Extension For Huntington Beach

Oil sand reported in San Martinez project results in preparations for further tests

By WM. V. GROSS
Staff Representative

Huntington Beach, Calif.—Huntington Beach may not drop from the center of attention as soon as conditions there two weeks ago seemed to indicate, as the San Martinez extension project has uncovered an oil sand at about 3120 feet. This means the neighborhood around Ocean Avenue and Ninth street will be thrown open for development, pending the outcome of the San Martinez Oil Company's production test.

Oil sand in the wildcat is reported to be more than 40 feet in thickness and is of sufficient importance to have given rise already to considerable speculation. Following the announcement of the discovery of the sand, several new wells have been started without waiting for results from the production test. Julian Petroleum Corporation has started two wells in the vicinity of the San Martinez wildcat, while other operators largely have restricted their actions to making new locations.

The week ending February 12 was an off week for Huntington Beach Townsite and Barley Patch areas so far as completions and producers are concerned. The field's daily average output dropped from 53,475 barrels last week to 50,125 barrels this week. The aggregate initial for the week has been the lowest since the peak of production was reached. Six wells brought in had a total flush of 547 barrels, an average of 90 barrels per well. This compares very unfavorably with the field's average initial per well of 763 barrels.

Although seven wells spudded in during the week, the number of drilling operations in the booming area has decreased from 100 to 95. This condition is not expected to continue if the San Martinez wildcat is completed for commercial production. Twenty-two rigs, located in the Barley Patch and Townsite, represent operations contemplated for the future. It is very doubtful if all will be listed eventually as drilling operations.

Huntington Beach Completions

All the wells brought in at Huntington Beach this week were below par. Out of the six, only two were brought in without the help of the pump or compressor. The Ahlburg Gasoline Company's Abel No. 2, which failed to flow when swabbed, is on the compressor making 150 barrels of fluid, 50 per cent cut. The six-and-one-fourth-inch oil string was landed at 4386 feet. Another well which would not come in of its own accord is the California Petroleum Corporation's McLachlen No. 1, which is pumping about 120 barrels from 4396 feet. McLachlen No. 1 is cutting 15 per cent. The Richfield Oil Company's Dike No. 1 was completed on the pump for an initial estimated at 150 barrels. The well, which is producing from a total depth of 3805 feet, is pumping considerable mud and emulsion into the sump. Three small producers were brought in during the week by the Standard Oil Company of California. The Standard's H-21 made an estimated initial of 35 barrels at 4277 feet. Its H-22 made 11 barrels after being plugged back from 2149 to 2109 feet. H-22 is cutting more than 40 per cent. Heffner No. 1 of the Standard was the best of the trio, coming in barefooted for 66 barrels of 17.2 degrees gravity oil.

The character of recent completions at Huntington Beach, as illustrated by this week's additions, perhaps has served to accentuate interest in the extension developments under way. New flush is needed to offset the downward trend of the area's production curve. It is doubted whether extension work now being carried on east and west of the Townsite and Barley Patch will furnish sufficient flush to overcome this gradual decrease.

Fate of Potrero Unknown

Potrero, about midway between Inglewood and Rosecrans fields, is by far the most intriguing wildcat venture on the Pacific Coast today. It is not known whether the area is capable of commercial production, and yet, exorbitant prices are being paid for leases. Operators generally regarded as fairly conservative have not been content with merely taking protection acreage. They are building derricks and rigging up on locations literally surrounded by dry holes, a most unusual procedure when not even a production test of either of the two determining wells, the Julian Petroleum Corporation's Smith No. 1 and the Associated Oil Company's Cypress No. 1, has been made.

Information on the depth of the Julian project is not available for publicity. The organization will issue for publicity no official announcement which can be taken to coincide strictly with specifications of the Ninth Commandment. The following analysis of the situation is to be taken as strictly hypothetical:

Cypress No. 1 of the Associated cemented eight and five-eights-inch pipe at 4383 feet and stopped drilling at 4450 feet, according to an official announcement. The Julian's Smith No. 1, according to some field reports, picked up a sand at 4345 feet which continued below 4478 feet. However reliable field report of the well's status, February 13, accredited it with having cored gray sand at 4535, a condition which decreased the prospects for commercial production. The little work that has been done on this project lately has been done mostly at night as the drill stem is rarely seen in the hole in the day time. Julian acknowledges no findings of any importance, but is making no desperate efforts to unload its holdings at Potrero. The Associated states that it has an oil sand. It is merely "standing pat", presumably until market conditions justify taking the oil from its natural reservoir.

Three New Girls in One Office One Day

Houston.—Rycade Oil Corporation's Houston headquarter office force reporting three baby girls on Valentine Day. J. D. Hill, chief accountant for Rycade, reported twin girls, Grace and Dorrance, who weighed 12 pounds together, and Louis H. Kennon, purchasing agent, reported an eight-pound girl. This runs Hill's total to four and Kennon's total to two girls. Fred Dallas, production superintendent for the Rycade in the Southwest division, who has been living up to his title in the past, having four husky boys to his credit, is reported to be about ready to withdraw his flag.

Brown County Oil Moving in Tank Cars

Cisco, Texas.—Tank cars are to be pressed into service by the Sinclair Oil & Gas Company to get relief from the pipe line congestion that has developed lately in the Fry field, Western Brown County, Sinclair has a 50-acre lease with six wells making 4712 barrels of 43-44 degree gravity oil, according to gauge ending 7 a. m. Tuesday morning, and has been forced to store a portion of current production, with the balance going to Prairie. Sinclair is building seven miles of four-inch line from the lease to Bangs, where a 32 car capacity rack is being built on the Santa Fe Railroad. The rack will be in operation next week, and the crude to go to Sinclair's refinery at Houston.

Re-Conditioning of Wells Increases Panhandle Production; Storage Stocks Larger

Amarillo, Texas.—The re-conditioning of completed wells in Hutchinson County by shooting and cleaning out paraffin accumulation in the casing accounted for the production gain in the Texas Panhandle during the past week. The daily average output for the district amounted to 133,120 barrels, as compared to 127,290 barrels for the week previous.

Although Northeastern Carson County is receiving more new field work than any other section of the Panhandle, the river sections in western Hutchinson County are in for a steady development campaign over the next few months. The Prairie-Merchant area on the north side of the river is due shortly for several completions around the discovery well, which continues to make about 500 barrels daily, and last week Anderson & Pritchard et al's Wm. Yake 1, extended the oil area more than a mile to the north. The Yake test is located in the southwest corner of the northeast quarter section 1, H&GN survey, block "J", and is spraying 15 barrels of oil daily with a heavy flow of gas at 2746 feet. The gas is coming from 2430-2640 feet.

More acreage on the south side of the river in Hutchinson County was thrown open for development when the Roxana Petroleum Corporation's Lee Bivins 1, section 86, developed considerable oil in the hole after passing through a good show at 2940-45 feet. This test is drilling below 3020 feet, with a surface elevation of 3065 feet. Acreage lying several miles to the east of the Roxana test was started on an active drilling campaign through the performance of the Phillips Petroleum Company and Gibson Oil Corporation's Paramount-Sanford 1, section 82, increasing its flow to above 800 barrels daily. This test logged the lime at 1785 feet with a surface elevation of 3023 feet, and the oil pay at 2959-3006 feet. Bottom hole water developed, and the hole was successfully plugged back to 2996 feet. The production was mostly water for the first few days of swabbing, but the water gradually disappeared, and by the end of a week the production was up to 500 barrels natural.

The Roxana field in northeastern Carson County was widened a half mile to the east by the Magnolia's Fee 1, section 91, swabbing 150 barrels at 3159-69 feet, with drilling continuing. The Champlin Refining Company, Enid, Oklahoma, scored its first producer in the field making 250 barrels natural from two pays at 1376-90 and 3191-3210 feet. The lower horizon was granite wash pay.

January movement of crude in tank cars from the Panhandle district amounted to 12,645 cars, or an average of about 408 cars daily. This movement of crude fell below the average for the previous month due to high premium demands for oil in Hutchinson County curtailing the interest of independent buyers. The Plains Pipe Line Company, which has been one of the largest tank car shippers of crude, also curtailed its deliveries during January in order to build up stocks against a higher posted price.

Crude stocks in the Texas Panhandle district registered a gain of 1,020,540 barrels during January, as compared to a gain of 1,092,475 barrels in December. Total stocks in the district at the close of January amounted to 11,112,965 barrels, and were held by the following companies:

Magnolia Petroleum Co.	3,147,510
Gulf Pipe Line Co.	2,363,390
Phillips Petroleum Co.	2,030,100
Prairie Pipe Line Co.	946,375
Marland Pipe Line Co.	725,375
Skelly Oil Co.	714,910
Humble Pipe Line Co.	422,020
Plains Pipe Line Co.	323,650
Dixon Creek Oil Co.	188,375
Empire Gas & Fuel Co.	126,995
Atlantic Oil Prod. Co.	58,950
Japhet Prod. Co.	29,980
Roxana Pet. Corp.	22,210
Devonian Oil Co.	10,080
Mid-West Exploration Co.	3,045
Total	11,112,965

Second Production Level At Noodle Creek

Abilene, Texas.—Marland Oil Company's Mason-Harris 2, which failed to produce in the regular pay in the Noodle Creek field, Jones County, although offsetting two producers, definitely established a second pay for the field early this week by swabbing 132 barrels of 33.5 degree gravity oil during an eight-hour test at 3036-39 feet. Swabbing failed to lower the fluid level in the hole, and a good producer is assured. Contractor's tools have been ordered away, and Marland will complete the well at the present depth. This discovery greatly enhances the possibilities of the field, and the pay formation is reported to be a sandy-lime similar to the upper oil horizon.

PANHANDLE OPERATIONS

Amarillo, Texas—Condensed summary of field operations in the Texas Panhandle district at the close of the week ending February 12, is listed below by counties, with comparative totals for the previous week:

	Completions	Active Tests	Shut Downs	Rigs and Derricks	Locations	Totals
Armstrong Co.	..	..	1	..	..	1
Briscoe Co.	..	..	..	..	1	1
Carson Co.	3	44	5	22	5	79
Castro Co.	..	1	..	1	1	3
Childress Co.	..	..	1	1	..	2
Cochran Co.	..	..	1	..	..	1
Collingsworth Co.	..	2	1	..	1	4
Dallam Co.	..	1	2	..	..	3
Deaf Smith Co.	..	1	..	1	..	2
Donley Co.	..	1	..	..	..	1
Gray Co.	2	30	9	13	3	57
Hansford Co.	..	..	3	..	..	3
Hartley Co.	..	5	3	..	..	8
Hemphill Co.	..	..	4	..	..	4
Hutchinson Co.	5	145	23	67	53	293
Lamb Co.	..	..	1	..	..	1
Lipscomb Co.	..	1	1	1	..	3
Lubbock Co.	..	..	1	..	..	1
Moore Co.	1	6	5	1	..	13
Motley Co.	..	1	..	..	..	1
Oldham Co.	..	..	..	1	..	1
Ochiltree Co.	..	..	3	1	..	4
Parmer Co.	..	1	..	..	..	1
Potter Co.	1	..	2	1	..	4
Randall Co.	..	..	..	..	2	2
Roberts Co.	..	2	3	3	..	8
Sherman Co.	..	1	1	..	2	4
Swisher Co.	..	..	1	..	1	2
Wheeler Co.	..	14	4	9	10	37
Totals	12	256	75	122	79	544
Totals prev. week	16	257	69	115	73	530

Halliburton Tester Used In Mexia Well

Mexia, Texas.—Progress on the Sun Oil Company et al's Trinity sand test in the Richland field has been slowed down by cavings in the hole while drilling in broken lime with streaks of sand at 5263 feet. This test is located on the H. A. Swink land, lease "C", and attracted considerable attention several years ago when live oil showing water was bailed at 4843-55 feet and more oil at 5186-89 feet. These oil showings came from the Glen Rose limestone, and the main body of the Trinity sand has not been encountered. The last string of casing set in the hole was 8¼-inch at 3843 feet.

The Trinity sand test on the west side of the Mexia field has reached a depth of 4155 feet, and logging hard lime. This test is being financed by E. L. Smith Oil Company, Humble, Magnolia and others, and is contracted to go to 5500 feet. The Pandem Oil Corporation and Harrison's Trinity sand test at Kosse, has resumed drilling with cable tools at 3715 feet after landing 8¼-inch casing and changing from rotary.

The Erle P. Halliburton sand tester was introduced last week for the first time in the Mexia-Corsicana district for testing oil or gas showings in a drilling test, and attracted considerable attention among the operators. This equipment was used by The Texas Company's Byron Cheney 1-B, which is exploring a wildcat drilling block located along the Mexia fault and between the Richland and Corsicana-Powell fields. A two-foot layer of sand logged at 2963-65 feet was tested by the Halliburton process without having to set casing. The formation proved dry, and deeper drilling is now under way.

Borger Shaken Up

Amarillo, Texas.—The oil field town of Borger and surrounding territory was severely shaken and showered with rocks late Monday night when a nitroglycerine storehouse of the Thompson Hardware Company was blown up. The magazine was located several miles west of town. A rock hurled by the explosives caused fatal injuries to Melvin Norris, a driller from Uncas, Oklahoma.

S. R. Barber, formerly with the Producers & Refiners, Amarillo headquarters, has joined the scouting force of Vacuum Oil Company, effective last week, and will be in charge of the Panhandle territory with headquarters in Amarillo.

Three West Texas Counties Have Big Flush Wells

Pecos, Crane and Upton Counties have producers which threaten to become factors in the market situation

San Angelo, Texas.—Pecos, Crane and Upton Counties divided honors on scoring big flush production during the past week, and the unusually heavy flow of wells in the former two counties on practically virgin acreage commands recognition in crude market circles.

The Yates field in eastern Pecos County added its second completion Friday when the Mid-Kansas Oil & Gas Company and the Transcontinental Oil Company's I. G. Yates 2 gauged 3440 brarels daily average for the first three days after drilling sandy-lime pay at 999-1002 feet, and during the 24-hour period ending Tuesday morning put 3380 barrels of 30 degree gravity pipe line oil in a 55,000 barrel steel tank on a nearby hillside. This well is producing from the shallowest oil pay in the entire West Texas district, and is 537 feet due west of the discovery well of the field.

University of Texas' fee land in northeastern Crane County, which is known as the Church & Fields area, was thrown into the midst of a serious over-production by the completion of a 330 barrel per hour well by Simms Oil Company and Atlantic Oil Producing Company, and a 125 barrel per hour well by Gulf Production Company. Humble's six-inch line serving this field and also the Gulf-McElroy area to the south is the only means of moving the oil out, and a lone 55,000 barrel steel tank owned by Humble is loaded.

The Simms-Atlantic well is located in the southeast corner of section 39, and a northwest offset to a 1800 barrel producer completed January 30 by the Eastland Oil Company and J. D. Collett. The production of the former well had to be diverted to hurriedly built earthen storage early this week, and can not be pinched in until the tools are pulled from the hole. An actual gauge of this well early Monday filled a 250 barrel tank in 55 minutes.

Sixty-Four Foot Sand

Sixty-four feet of sandy-lime pay was taken by the Simms-Atlantic well before drilling was halted by the flow of oil, having encountered the top of the pay at 2889 feet, and the first steady flow of oil at 2910 feet. The total depth of this well is 2953 feet, with a surface elevation of 2574 feet. The Simms-Atlantic well found oil production after going 49 feet in the big lime, which was logged at 2840 feet. The Eastland-Collett offset producer has been drilled only 15 feet in the oil pay for a total depth of 2905 feet, and is believed to have a potential output as great as the nearby gusher if a like amount of pay is drilled, since it has held within 50 barrels of its initial flow for more than a week. The Eastland-Collett well logged the big lime at 2826 feet, with a surface elevation of 2570 feet. This well is on the south end of the field.

Gulf Production Company's University-Lassiter 2, located on the northeast side of the field and probably near the edge of the producing area, flowed 120 barrels per hour for two hours last Thursday from pay at 2964-80 feet, and was pinched in to 20 barrels per hour for lack of storage and pipe line facilities. This well is only 16 feet in the pay, and will probably register a much larger flow when completely drilled in. The Gulf well encountered oil after drilling 71 feet in the big lime horizon. Several open flow gauges taken on Gulf's well since Thursday indicate that it is maintaining its pressure, and early Tuesday of this week a three-hour open flow test averaged 124 barrels of 33 degree gravity oil per hour. Humble has been taking a portion of the output of this well, and is also running the production of other producers in the field.

Magnolia's University-O'Keefe 3, a south offset to Gulf's big producer, has been flowing 400 barrels daily from ten feet of pay at a total depth of 2967 feet, and will not be drilled into the main pay until storage can be built. Magnolia has ordered several 55,000 barrel steel tanks for erection on the ground, while a large tank farm will follow later on the Texas & Pacific Railroad, with a connecting pipe line.

Church and Fields

More than 50 tests are getting started in the Church and Fields area, and a rush will be staged for the flush production, with prospects of having a major type of field in about three months. The University of Texas receives one-eighth of the oil produced, and indications are that the producing area will extend south and tie up with the Gulf-McElroy property, which has already registered a big flush production.

A faulted condition is believed to be responsible for the heavy oil production obtained in the Yates field, Pecos County, and evidence of this is borne out by the fact that the top of the big lime drops about 1050 feet between the Yates producers and Gulf's Thompson wildcat failure, which lies across the Pecos River in Crockett County and about five miles northeast of the big shallow producer. Indications that the Yates field may cover a large area loomed bright last week when oil was obtained in the Texon Oil & Land Company's Yates 1, center section 55, block 1, about four miles southeast of the Mid-Kansas & Transcontinental's two wells. Texon and Kemper and Kimberlin were 50-50 on this wildcat, and Monday the latter sold his interest in the well and 640 acres to Texon for $160,000 cash and a like amount payable out of 7/16 of the oil produced, or on a basis of $1000 per acre. The Texon well encountered the pay at 1255 feet with 12½-inch casing set at 500 feet, and filled 600 feet with 29.8 degree gravity oil from the top of the pay. Eight-inch casing is to be set on bottom with packer, and a test made of the production late this week.

Since Mid-Kansas & Transcontinental control about 9500 acres in a solid block around their Yates property, very little acreage was open for purchase after the big well was scored. However, many companies and operators jumped across the river in Crockett County and bought protection as close as could be had to the producers at fancy prices. Prior to the drilling in of this well a 55,000 barrel steel tank had been completed to serve the discovery well, which is doing about 350 barrels daily, and a second tank is under construction A contract was made recently to sell 5000 barrels of crude daily to Humble, and a line is to be built to Humble's tank farm and refinery site at McCamey.

The southeast end of the McCamey-Johnson field, Upton County, accounted for two more good wells early this week, including a 100 barrel per hour well from Prairie Oil & Gas Company's J. F. Lane 2, which logged the pay at 1948 feet, with the main pay at 2020-26 feet. The Dixie Oil Company's A. S. Burleson 17 flowed 95 barrels hourly from regular pay at 2004-86 feet, with the big pay at 2057-86 feet.

A. B. Ryan, vice-president of the Federal Supply Company with headquarters at Fort Worth, and Miss Reva Harrison of Fort Worth, were married February 12 in the latter city, and departed for California for a visit of several months. Ryan was promoted from secretary to vice-president of the Federal Supply Company just prior to his marriage.

Marland Oil Company's Panhandle field camp, among the largest and best arranged for convenience and comfort.

Panhandle Set High Production Stride Last Year

With a total of 25,308,924 barrels for 1926 the district has important influence

By H. H. KING
Staff Representative

Amarillo, Texas.—The Texas Panhandle district experienced its first year as a major source of high gravity crude production during 1926, and occupied a prominent position among the leading oil districts in the country by producing 25,308,924 barrels during the 12-month period. The total oil recovery in the Texas Panhandle district since the completion of the discovery well in February, 1921 amounted to 26,929,309 barrels at the close of 1926, and approximately 94 per cent of this volume was obtained during the past year.

Beginning the year 1926 with a daily average production of 3500 barrels from a small group of wells scattered over Hutchinson, Carson, Gray, Wheeler and Potter Counties, the Texas Panhandle recorded an almost steady production increase until a peak daily output of 166,590 barrels was reached for a brief period in November. The high mark on total monthly production for the district was reached in October, 1926 when an aggregate of 4,658,315 barrels of pipe line oil was stored in the district, or shipped to distant refining centers in tank cars.

Hutchinson County's big flowing wells in the sandy-lime pay furnished the long end of the crude production accredited to the Texas Panhandle during 1926 with a total production of 22,891,384 barrels for the year. This county's total crude yield at the close of 1926 from 582 completed oil wells amounted to 23,302,259 barrels, of which only 410,875 barrels was produced during 1922, 1923, 1924 and 1925, thereby illustrating the strides made during the past year.

History of the oil development in Hutchinson County is marked by unusual features, and probably the most outstanding one is that the big production was uncovered in 1926 between wells that were completed as small pumpers in 1922 and 1923. Except for a few minor extensions, the oil producing area has been found restricted to the area outlined by the first few producers drilled in the county in 1922 and 1923. W. H. Holmes, McElroy and John W. McGee's Smith-Capers 1, discovery well of the county, has since been found located near the eastern rim of the great lime basin, while the Gulf Production Company's Dial 1, second producer in the county, stands as the north end of the field's prolific oil area. J. O. Whittington's Sanford 1 is likewise near the western edge of the oil field. The oil industry had its first beginning just south of the Hutchinson County line on the Burnett Ranch, Carson County, where Gulf's Burnett 2 scored the first oil in February, 1921, and the wildcat work in Hutchinson County by the above named operators followed in the wake of this pioneer operation in the district.

The remoteness of the Hutchinson County oil area from railroad transportation and direct pipe line facilities were the principal factors causing the long delay in fully exploiting the oil producing horizon, while false ideas on the difficulty to be had in handling the oil during the winter months because of congealing also discouraged big investments for development. The field was forced to a showdown by the small operators and individual lease owners gaining the attention of Oklahoma and Kansas operators, who were without an active field in their respective states during the early part of 1926 and selected the Panhandle for a play on its potentialities. Aggressive lease buying by new comers into Hutchinson County started the boom going early in 1926, and the major companies that helped pioneer the field then pitched in for a larger share of the prospective acreage. Competitive buying and offset drilling that followed made the field.

Hutchinson County was at its peak level of production before railroad facilities were available at any point in the county, and the drilling equipment, casing, tankage, field camps, etc., were transported overland via truck for an average distance of 30 miles. The Santa Fe Railroad provided the field with its first direct railroad connection on October 16, 1926, with a 30 mile spur line from the town of Panhandle, and it was this month that the field made its highest mark on production. This line was soon made one of the busiest carriers in the southwest, due to heavy volume of inbound tonnage, and tank car movement of crude that passed 100,000 barrels daily, including that handled by the main line between Amarillo and Pampa also.

The high mark of production in Hutchinson County was handled without a single trunk line outlet, and the first of three pipe lines now building to the district will not be in operation until next April. However, local crude lines extending to tank car racks on the Hutchinson County railroad spur, and to racks at Kings Mill, Panhandle and Amarillo served to scatter the tank car congestion in such a way that the railroads could handle same, while large steel tankage built in and near the field took care of the surplus.

Except for the crude consumed by a refinery at Amarillo, and several small topping plants in Hutchinson County, all the crude produced in the Texas Panhandle has been shipped to distant markets via tank cars, but 10,092,425 barrels, which represents the total crude stocks on hand in the district at the close of 1926.

Success in getting flush production in Hutchinson County and expectations of same has been largely responsible for the operators in disregarding the $1.25 per barrel posted price prevailing in the county since last September and early October. Carson County's crude output is quoted on the same basis, while some buyers are using this flat price scale in paying for oil taken out of Gray County. Humble uses a gravity scale of prices in

"OILWELL" CROWN BLOCKS

Side view of 12-inch Rotary Crown Block

"OILWELL" Crown Blocks can be furnished with sheaves made of Cast Iron, Steel or Manganese Steel. The beams used range from 8" to 15" and weigh as high as 50 pounds per foot, depending on the work required.

When furnished for Cable Tool Rigs or where cleaning out and pumping are to be done after completion of the well, a sand line sheave is added, two of the inside beams being extended to carry this sheave.

All "OILWELL" Crown blocks have the following superior features:

1. All sheaves are machined in the grooves, and have holes through the web for attaching a line to pull them up in the derrick.
2. All bearings are either of the Ring Oiling or Roller Bearing type which makes them weatherproof and dustproof. The bearings are held in place in such a manner as to make it impossible for any of the bolts, should they get loose, to drop and cause damage or possible injury to any of the crew. The base of each Ring Oiling Bearing acts as a reservoir for the oil and is of sufficient capacity to make the oil supply last for long periods of operation. Roller Bearings are located in the hubs of the sheaves and are lubricated by means of the Alemite System. Adjustment is the same as that for Ring Oiling Bearings. If desired, one or more sheaves can be furnished with roller bearings and the remainder with ring oiling bearings.
3. Each block is furnished with "T" slotted side rails which permit easy adjustment of all sheaves. Simply loosen two nuts on each bearing.
4. Spacing blocks are of cast design and permit more rigid assembling than when pipe spacers are used.

Top view of 12-inch Rotary Crown Block

Inquire at Any of Our 100 Branches

OIL WELL SUPPLY CO.

NEW YORK—LOS ANGELES—PITTSBURGH, U.S.A.—SAN FRANCISCO—TAMPICO—LONDON

WORLD'S OLDEST AND LARGEST MANUFACTURERS OF OIL FIELD EQUIPMENT

Say you saw it in The OIL WEEKLY

Gray and Wheeler Counties that net the producers a better price for their oil, but Humble is paying the flat price for Carson-Hutchinson Crude, having introduced same on September 23, 1926.

Although Hutchinson County offers hundreds of proven locations for drilling in the future, this county is generally believed to have registered its high mark on crude production, and operators are leaning heavily on Carson, Gray and Wheeler Counties to furnish the next important fields, while the possibilities of a field or two in Moore County, which lies west of Hutchinson County are still considered somewhat likely, due to the presence of favorable structural conditions along the north flank of the submerged granite ridge extending across the county. Hutchinson County has less than a score of dry holes, although the upper gas pay saved a few more from being dry.

Northeastern Carson County held the center of interest towards the close of 1926 due to the completion of attractive flowing wells in the sandy-lime and granite wash horizons, with prospects of linking up the original Carson-Hutchinson County area with the Pampa-Wilcox field, Gray County. However, a few semi-barren spots along this trend of production across Carson and Gray Counties have been established to date.

Beyond the Pampa-Wilcox field in Gray County in a general line towards the Shamrock oil field in Wheeler County lies a stretch of territory that has not been explored to any great extent, and two wilcat oil producers stand out as markers for the possible beginning of new fields. Roxana's pumper on the B. E. Finley land, Chaney survey, and the Nabob Oil & Gas Company's J. S. Morse 1, section 68, block 25, Gray County, are rank wildcats far removed from other oil production, and the latter producer has gained in production since completion. Operators have supported their confidence in the development of an important oil producing area between the Nabob well and the Shamrock field, Wheeler County, by paying big bonuses for protection leases along the 15 mile stretch between the two areas, but confining their purchases to the north flank of the submerged granite ridge, which is overlaid with big gas production.

Wilcatting in other Panhandle Counties has been somewhat active during the past year, but drilling progress has been slow, and only about a dozen decisive tests were put down during 1926. New gas areas have been uncovered by this exploration work in Collingsworth, Moore and Sherman Counties.

The Panhandle district is destined to hold a prominent position in oil producing circles for some years ahead, and with better crude prices available upon the completion of direct pipe line outlets to distant refinery and market centers the owners of producing leases will reap greater returns on their investments. Drilling costs have been materially reduced in the established fields, while the combination rotary and cable rig has been found economical and faster in a number of sections in the district. The crude yield per acre in Hutchinson County has exceeded early predictions, and production in Carson, Gray and Wheeler Counties is promising a favorable yield per well over a long period. The widespread activities of the natural gasoline plant operators has provided an additional source of revenue for lease owners with oil producing wells, and most every lease is, or well be shortly, served by a natural gasoline plant.

Total crude production in the Texas Panhandle district since the completion of the first well in February 1921, to the end of 1926 is listed below by counties, with the last two years output of each county shown by months:

Texas Panhandle Production By Counties

	Hutchinson County	Carson County	Gray County	Wheeler County	Potter County
Totals for 1921	.....	1,000	.....	.....	.....
Totals for 1922	815	2,680	.....	.....	.....
Totals for 1923	1,515	32,790	.....	.....	.....
Totals for 1924	26,050	271,085	.....	.....	.....
January, 1925	5,635	33,780	.....	.....	.....
February	5,550	52,410	.....	5,040	.....
March	7,100	64,790	1,395	2,605	.....
April	21,285	83,050	1,680	2,460	.....
May	21,135	83,770	1,615	1,830	745
June	25,220	81,375	870	2,550	750
July	30,495	79,840	375	2,725	.....
August	40,855	69,950	1,740	2,450	95
September	45,035	79,305	1,770	2,640	1,020
October	41,025	81,375	2,050	2,235	620
November	69,450	76,885	2,910	660	840
December	69,710	64,285	4,710	2,725	35
January, 1926	80,885	65,625	5,395	2,915	590
February	88,925	51,030	3,840	3,250	505
March	166,180	60,395	10,105	2,695	125
April	258,675	65,710	14,280	2,850	.....
May	898,640	94,835	14,385	2,635	220
June	1,201,340	81,690	86,310	6,090	840
July	1,835,790	87,480	94,520	10,485	1,765
August	2,721,995	118,145	117,460	2,295	895
September	3,315,909	118,860	111,415	7,475	.....
October	4,297,390	104,290	240,460	14,380	1,795
November	4,224,100	98,120	289,550	20,245	455
December	3,801,555	89,490	289,485	21,350	810
*Totals	23,302,259	2,194,040	1,296,320	124,585	12,105

*These figures have been compiled from individual field records and represent as near as possible the actual production. There is a slight difference between this compilation and that found elsewhere in this issue giving Texas Production by Fields by Years due to the fact that the latter mentioned figures have been taken from Department of Commerce and A. P. I. estimates.

Allen Dome Test Shows 36 Gravity Oil

Houston.—Roxana Petroleum Corporation's Allen Bernard River No. 1 wildcat at Allen Dome, Brazoria County, bailed several barrels of 36 gravity from a total depth of 4238 feet last week with considerable salt water, and was still bailing the hole Tuesday of this week. One hundred and forty feet of screen was set to 4172 feet, below which the hole was plugged off. The formation from which the oil is coming is shale with streakes of sand.

Roxana, which controls Allen dome in a solid block, having outlined the dome in 1925 with geophysical instruments and later found the cap with a shallow test, has the Allen No. 3 setting 6⅝-inch casing at 5337 feet. This is the deepest hole yet drilled off the dome, and will probably be carried several hundred feet deeper in an effort to pick up a low pay sand. Location was made early last week on the Reese Survey on the north side of the dome for Reese No. 1, 865 feet south and 450 feet east from the northeast corner of the survey, on the north side of the dome. This well was drilling at 194 feet in gumbo Tuesday morning.

Commission Puts Two Men in West Texas

San Angelo, Texas.—Rapid development of established oil fields and increased wildcat operations in the West Texas district has resulted in the oil and gas division of the Railroad Commission of Texas putting an additional deputy supervisor on duty. The West Texas district, which is known as No. 14, includes 44 counties, and is now being covered by John Hoffer, who has served as deputy supervisor for about seven years, Hoffer's services dates back to the beginning of oil production in West Texas.

J. A. Morehouse, formerly deputy supervisor in the Gulf Coast district, has been transferred to West Texas, and is accompanying Mr. Hoffer on a tour of the district for the purpose of making recommendations to the Railroad Commission for the division of district 14. After a split is made of the 44 counties, each supervisor will have a separate district.

Henry E. Marshall, attorney and oil man of Houston, died at his home February 12. Mr. Marshall has been connected with the oil industry for several years, and owned considerable land around the Hull, Liberty and Batson domes. He was formerly associated with D. J. Harrison, independent of Houston. He was the father of Henry E. Marshall, Jr., member of the Vacuum Oil Company production department, Houston office.

Moore
TUBULAR STEEL DERRICKS

Producing—

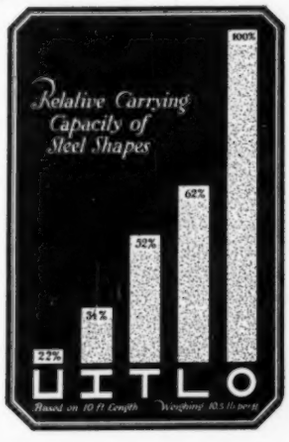
Long after it's written off the books!

A DERRICK to be truly economical must deliver long years of continuous service—must be used again and again, in one location after another—must have light weight with great strength—must be simple to erect and to dismantle—must be easy to transport from place to place. ***Here the Moore Tubular Steel Derrick has no equal.***

Brute Strength

A steel tube 10 feet long, weighing 10.5 pounds per foot, will carry a compressive load of 34,100 pounds, as against 21,400 pounds for the next best steel shape of the same weight. ***Compressive strength***—that's what the Moore Tubular Steel Derrick provides ***and that's what you need.***

World Wide Service For Twenty Years



LEE C. MOORE & COMPANY, *Inc.* PITTSBURGH · TULSA

Established 1907

CASPER WYO. Midwest Building
DALLAS, TEXAS Magnolia Building
SHREVEPORT, LA. Merchants Building
EL DORADO, KAN. Santa Fe Tracks
PARKERSBURG, W. VA. Union Trust Building

West Texas Thought to Be Source Of Much Future Oil

New production territory in seven counties certain to furnish development for many years

By H. H. KING
Staff Representative

San Angelo, Texas. — The greatest potential source of new crude production in the Southwest for the next several years is generally believed to be in West Texas. This district has attracted more companies and operators from other oil producing centers during the past year, and added more producing acreage than any other section of the greater Mid-Continent district. West Texas made great strides in climbing to a more important position in the petroleum world during 1926 by adding a dozen new oil producing areas, extending production into seven new counties, and scoring one major oil producing area that is to be reckoned with in the future crude market.

Production in West Texas fields was just beginning to reflect the progress of development in the new oil producing areas at the close of 1926, with a daily average of 57,210 barrels during December. This production figure can be safely estimated to be more than doubled by the end of 1927 by reason of the slow crude decline curve in the Big Lake field, Reagan County, and increases to come from Crane, Upton, Pecos, Winkler, Howard and Jones Counties.

The total crude yield of the West Texas district since the completion of the first commercial oil well in Mitchell County, October, 1920, to the close of 1926, amounted to approximately 27½ million barrels, or a half million barrels above that recovered in the Texas Panhandle from its beginning in February, 1921, through 1926. The Big Lake field has been the principal source of crude production in West Texas, while the Hutchinson County field made the big record for the Panhandle, both having been supported by smaller producing areas in nearby counties. The Big Lake field is credited with having produced 21,204,705 barrels from May 28, 1923, to the first of the present year, and this sum represents approximately 77 per cent of the total oil produced in West Texas.

The Big Lake field stands as a goal for the West Texas operators to shoot at in their efforts to develop the best field in the district by reason of having produced 132,529 barrels per well up to the close of 1926, with 160 active oil producers listed. The Big Lake Oil Company and the Texon Oil & Land Company control the entire field, and have maintained daily production within 11,000 barrels of the peak daily output, which amounted to 41,508 barrels from 50 wells on September 1, 1925.

A near duplicate of the Big Lake field is believed to have been uncovered by the Gulf Production Company through its wildcat efforts on the J. T. McElroy ranch, which straddles the Crane-Upton County line. Gulf's first test on an 18,000 acre drilling block registered a flush production of 1000 barrels of 33 degree gravity oil from sandy-lime pay at 2728-2830 feet, and before the end of the year nine producers were put on the active list, with an initial flow running upwards of 3500 barrels daily from this pay level. Gulf obtained possession of all close in acreage through the purchase of the checkerboard acreage held by W. H. "Bill" Dunning of Fort Worth for a consideration involving approximately $2,000,000 with a 1000 barrel producer offsetting the discovery lease. The oil producing formation in the Gulf-McElroy field has been analyzed and found to be almost identical with that in the Big Lake field, although the depth in the former field is slightly shallower.

The productive limits of the Gulf-McElroy field are still an unknown quantity, with several square miles of acreage proven for flush production, and possibilities of it extending several miles north and tying in with the Church & Fields area, which was discovered about three months before Gulf's strike. The McElroy property affords Gulf a reserve supply of oil that can be built up to major proportions by active drilling, and no water is encountered with the oil. Other than the oil stored in two 80,000 barrel tanks on the McElroy lease, Gulf has been selling its entire output to Humble, but late in 1926 an eight-inch pipe line to tank car rack and tank farm near Midland was ordered installed by Gulf. This local line will be the first unit of a direct pipe line outlet to the Coast by Gulf.

The Independent-Taylor field, located on the south end of the Crane-Upton County line, and the Church & Fields area, located on fee land of the University of Texas in the northeastern part of Crane County received the most development of any of the wildcat discoveries made during 1926 in West Texas. The latter field is rated highly for future oil production, due to the pay formation and the structural conditions being somewhat similar to that found at Big Lake. The Independent-Taylor field was the first important strike made in West Texas during 1926, and is so named by reason of having been discovered by the Independent Oil & Gas Company on the Len Taylor land. The southeast trend of production in this field has proven to be the most prolific, although considerable water must be handled with the oil after a big well has been on production for a few weeks The Hurdle district, or Johnson-McCamey field in southwestern Upton County, added more than 100 new wells during 1926, although the field was uncovered in September, 1925. This area hifted its trend to the southeast late in 1926, where the high point of the structure was uncovered by development work conducted by Dixie Oil Company, Roxana Petroleum Corporation, Texas Pacific Coal & Oil Company and the Prairie Oil & Gas Company, and the best part of the field is believed to be located on leases held by these companies.

The surprise completion of all the wildcat discoveries made during 1926 in West Texas came from the R. A. Westbrook et al producer on the T. G. Hendricks ranch, Winkler County, as this test was believed to be logging the key formations structurally low when two separate oil and gas producing horizons were drilled through for a 130-barrel completion at 2965-3005 feet. This wildcat strike sent the "play" off into a new direction, and resulted in big sums of money changing hands for lease and royalty protection. The well was sold to the Southern Crude Oil Purchasing Company, and further testing of the acreage is now taking place, with two completions due late in March by Southern Crude and Gulf.

Pecos County likewise furnished a surprise completion during 1926, when a joint test by the Mid-Kansas Oil & Gas Company and the Transcontinental Oil Company registered a flush flow of 350 barrels natural from sandy-lime pay at 990-1005 feet, thereby giving the county its first commercial producer. This strike was made in the eastern part of the county near the Pecos River, and is accompanied by a faulted

(Continued on page 160)

McEvoy Products

A line of high grade Oil Field Specialties

McEvoy Standard Strainer with Coupling

McEvoy Strainers and Set Shoe Assemblies, with couplings or flush jointed, are easily set and easily pulled if necessary.

McEvoy Brass, Bronze or Heat-Treated Steel Plugs cannot be damaged in setting.

Made in any size or mesh to suit any sand condition.

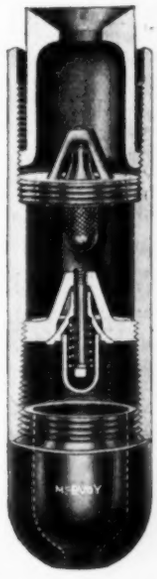
Spiral arrangement of Strainer plugs in the pipe insures greater torsional and pulling strength and greater collapsing resistance than any other screen made.

SPECIFY McEVOY PRODUCTS IN YOUR NEXT SETTING:

Strainers	**Set Shoe Assemblies**
Packers	**Lubricated Back Pressure Valves**
Lead Seals	**Wash Plugs and Wash Rings**

Upset Flush Joint Bailers

McEvoy Flush Joint Strainer



McEvoy Set Shoe Assembly with two lubricated back pressure valves

J. H. McEvoy & Company

Houston, Texas

600 Milby St. Phone Preston 1439

Pacific Coast Branch
McEVOY SCREEN PIPE CO.
2428 East 56th Street, Los Angeles

United States Daily Average Production

Figures below are taken from the complete revised estimates of the AMERICAN PETROLEUM INSTITUTE except for the current week, which are advance estimates issued by the A. P. I. and are subject to revision;

Month—	Oklahoma	Kansas	Texas (Outside Gulf Coast)	Gulf Coast	North Louisiana	Ark.	Eastern States	Rocky Mountain	California	United States Ave.	Gross
January	**449,370**	**100,130**	**260,180**	**90,290**	**43,990**	**181,190**	**101,000**	**102,300**	**621,300**	**1,946,980**	**60,356,380**
February	450,037	101,937	245,989	91,550	45,090	169,676	99,000	98,412	605,250	1,909,637	53,469,836
March	454,762	103,300	260,262	92,712	48,787	164,312	97,625	102,325	604,500	1,929,562	59,816,422
April	467,175	101,825	263,612	88,812	50,562	169,824	100,875	106,675	600,000	1,947,387	58,421,610
May	463,750	105,690	277,700	94,550	58,150	175,430	105,700	112,300	602,720	1,995,990	61,875,690
June	456,450	107,637	302,187	89,912	60,412	167,887	106,250	112,925	606,925	2,013,187	60,395,610
July	456,920	110,320	336,600	114,760	57,460	161,870	104,700	108,520	613,940	2,062,470	63,936,570
August	465,137	111,600	381,550	161,237	56,787	157,375	108,350	110,737	609,725	2,162,662	67,042,522
September	465,387	113,037	402,212	175,512	56,575	154,037	110,125	105,825	598,100	2,180,862	65,425,860
October	497,120	114,720	439,490	170,350	58,200	149,810	109,500	99,060	611,600	2,259,850	70,055,350
November	551,225	115,425	475,987	176,425	56,575	144,100	111,125	93,537	641,325	2,365,475	70,964,250
December	561,012	118,950	483,050	181,263	55,137	139,250	110,375	87,650	659,925	2,396,112	71,279,472
January, 1926	591,570	117,490	466,910	176,330	53,030	132,648	108,100	83,910	655,660	2,385,650	73,955,150
February 5	637,300	115,500	472,900	159,050	53,250	127,900	107,000	83,000	646,500	2,402,400	.....
February 12	692,000	116,550	477,450	161,300	52,600	129,650	107,000	84,200	641,500	2,462,250	.....
Increase	54,700	1,050	4,550	2,250	.....	1,750	.....	1,200	.....	59,850	.....
Decrease	.....	.....	.....	.....	650	.....	.....	.....	5,000	.....	.....

Texas

(Outside Gulf Coast

PANHANDLE DISTRICT

	Feb. 12	Feb. 5
Hutchinson County	116,600	113,400
Gray County	8,250	8,450
Carson County	6,600	5,650
Wheeler County	1,650	1,750
Others	50	50
Totals	133,100	129,300

NORTH TEXAS

Burkburnett	14,300	14,700
Electra	15,600	15,850
Iowa Park-KMA	4,950	4,950
Wilbarger	14,100	14,350
Archer County	32,950	33,850
Clay County (Petrolia)	900	900
Baylor County	150	150
Montague and Cooke Cos.	13,350	13,750
Totals	96,300	98,500

WEST CENTRAL TEXAS

Stephens County	9,750	10,200
Eastland-Desdemona	5,800	5,850
Brown County	30,400	27,600
Coleman County	1,750	1,750
Callahan County	6,650	6,600
Shackelford County	13,400	14,500
Young County	8,850	9,100
Throckmorton County	4,050	4,250
Jack County	750	750
Palo Pinto County	2,700	2,700
Jones County	4,150	3,600
Mitchell-Scurry Co.	2,250	2,250
Howard County	2,300	2,300
Reagan County	27,600	28,100
Crane-Upton Counties	39,200	26,250
Crockett County	1,200	1,750
Others	2,150	1,100
Totals	162,950	158,650

EAST CENTRAL TEXAS

Mexia	11,700	11,700
Currie	750	750
Richland	1,400	1,400
Wortham	5,000	5,200
Corsicana-Powell	21,300	21,850
Nigger Creek	6,450	6,750
Totals	46,600	47,650

SOUTHWEST TEXAS

Luling	18,400	17,850
Lytton Springs	2,450	2,850
Somerset	1,700	1,850
Laredo District	15,100	15,400
Piedras Pintas	200	200
Others	650	650
Totals	38,500	38,800
T'ls Tex. (Outside Gulf Coast)	477,450	472,900

TEXAS GULF COAST

West Columbia	10,400	10,750
Damon Mound	1,050	1,050
Big Creek	2,600	2,200
Boling	2,100	2,200
Blue Ridge	1,600	1,900
Pierce Junction	6,950	8,050
Humble	4,300	4,300
Goose Creek	8,050	8,050
South Liberty	4,450	4,400
Hull	16,900	17,850
Saratoga	1,250	1,150
Batson	1,650	1,600
Sour Lake	5,150	5,150
Spindle Top	74,400	69,250
Orange County	5,200	5,350
Others	3,650	3,300
Totals	149,700	146,800

Oklahoma

North Braman	8,900	8,550
South Braman	4,600	4,200
Blackwell	4,000	4,000
Hubbard	6,300	7,150
Thomas	1,700	1,750
Garber	18,700	18,800
Tonkawa	26,050	25,500
Burbank	49,200	47,550
Osage (outside Burbank)	35,100	35,250
Watchorn	2,700	2,700
Cushing	21,200	21,250
Yale Jennings	12,250	12,300
Davenport	4,050	4,050
Bristow Slick	27,300	27,350
North Okmulgee	16,900	17,000
Lyons Deaner	4,500	4,450
Stroud	1,650	1,650
Cromwell	13,000	13,250
Papoose	8,050	7,650
Wewoka	20,150	20,000
Duncan District	6,800	6,850
Earlsboro	17,000	9,050
Graham	8,950	9,000
Fox	1,900	1,900
Healdton	15,000	1,500
Seminole	268,400	226,000
Hewitt	10,400	10,400
Scholem Alechem	14,250	12,950
Others	62,300	61,750
Totals	692,000	637,300

California

Seal Beach	14,000	11,900
Sante Fe Springs	45,500	45,500
Long Beach	92,000	93,000
Huntington Beach	84,500	89,000
Torrance	25,000	25,000
Dominguez	18,000	19,000
Rosecrans	12,000	12,500
Inglewood	38,000	38,000
Midway-Sunset	90,500	90,500
Ventura Avenue	50,000	50,100
Others	172,000	172,000
Totals	641,500	646,500

Kansas

Florence-Covert	1,900	1,900
Peabody-Ebling	3,850	3,850
Eldorado-Towanda	13,200	13,300
Augusta-Fox Bush	4,650	4,700
Rainbow Bend	2,850	2,900
Russell	3,500	3,600
Greenwood County	42,900	43,000
Churchill	14,000	13,500
Others	29,700	28,750
Totals	116,550	115,500

North Louisiana

	Feb. 12	Feb. 5
Homer	5,350	5,250
Haynesville	8,200	8,400
Caddo Light	9,900	10,400
Caddo Heavy	4,150	3,550
DeSoto-Red River	4,000	3,950
Elm Grove	650	650
Bellevue	1,550	1,550
Cotton Valley	6,100	6,550
Urania	12,700	12,950
Totals	52,600	53,250

LOUISIANA GULF COAST

Vinton	5,700	5,800
Lockport	3,200	3,050
Evangeline	1,200	1,200
Edgerly	900	950
Others	600	1,650
Totals	11,600	12,250
Totals Gulf Coast	161,300	159,050

Arkansas

El Dorado	6,100	6,200
Smackover Light	12,200	11,950
Smackover Heavy	102,550	100,950
Stephens	1,500	1,400
Nevada	1,850	1,850
Lisbon	5,200	5,200
Others	250	300
Totals	129,650	127,900

Mountain States

WYOMING

Salt Creek	43,250	42,000
Grass Creek	2,850	2,750
Elk Basin	950	850
Big Muddy	2,750	2,950
Lost Soldier	3,600	3,850
Rock River	2,950	2,950
Teapot Dome	900	1,050
Lance Creek	750	750
Others	1,500	1,350
Totals	59,500	58,300

MONTANA

Cat Creek	2,400	2,350
Sunburst	10,000	10,000
Others	200	200
Totals	12,600	12,550

COLORADO

Moffats (Craig)	2,650	2,650
Fort Collins	4,000	4,000
Florence	500	450
Others	500	350
Totals	7,650	7,450

NEW MEXICO

Table Mesa	100	150
Artesia	2,000	2,000
Hogback	850	900
Rattlesnake	1,500	1,700
Totals	4,450	4,750
Totals Mountain States	84,200	83,600

EASTERN STATES

(Including Ill., Ind., Ohio, W. Va., Pa., Ky., and N. Y.)	107,000	107,000

PRODUCTION SUMMARY

East of Rockies	1,736,550	1,672,900
United States	2,462,250	2,402,400

A. I. M. E. PRODUCTION SYMPOSIUM FOR 1926

(Continued from page 62)

Sweet Lake Oil Field.

Oil production was definitely determined in October 1926, by the completion of the Pure Oil Sweet Lake No. 3 from a total depth of 5897 feet. This well was drilled only seven feet in the sand and flowed 175 barrels of oil of 28 degrees Baume. The oil is accompanied by a heavy flow of gas which had an initial rock pressure of about 1500 pounds. This well is the deepest producer on the Gulf Coast. The Pure Oil Company owns the lease on all nearby acreage.

Sulphur Salt Dome.

Sulphur dome has been a prolific producer of sulphur for the past 25 years. Some shows of oil have been hit in cap wells. However, it remained for the Union Sulphur Company in their well No. 719 to prove this dome to carry commercial oil. This well was completed during the latter part of December 1926 from a sand from 3402 to 3416 feet. It made 450 barrels of oil by heads with a gravity of 22 degrees Baume.

Spindle Top

Flank production on Spindle Top was discovered by Yount-Lee Oil Company in their McFadden No. 2 in 1925, on the south side of the dome. This area was developed slowly within the holdings of this company. The completion in May 1926, of the Yount-Lee Gladys City No. 4 for 6000 barrels from a total depth of 2967 feet extended the original area one mile to the northwest and started a rush of competitive drilling on about 30 acres divided into small tracts. Wells obtained initial flows of from 1000 to 12,000 barrels and the daily production by the second week in September had reached a peak of 101,000 barrels per day. The production has continued between 80,000 and 100,000 barrels per day up to the end of December. The accompanying graph shows the details of the production.

Spindle Top produced 13,121,468 barrels in 1926. Nearly all of this production came from 117 wells located on about 34 acres on the southwest and south flanks of the dome. This area averaged approximately 375,000 barrels per acre.

Boling

The completion of the Texas Company Taylor No. 3 on the south flank of Boling in December 1925 brought on a rapid campaign of closely spaced drilling in this area. Thirty producers and eleven dry holes were drilled. A peak of 8800 barrels was reached during the last week in March.

Sour Lake.

A rapid drilling campaign on the southwest flank of Sour Lake was started by the completion on January 18, 1926 of the Yount-Lee Gilbert No. 2. This well was drilled to a depth of 4198 feet and came in for an initial production of about 2000 barrels of 35 gravity oil. Drilling was extended from this well to the northwest, and a total of 30 producing wells were drilled on twenty acres.

Barbers Hill

A shallow productive area on the northwest flank of Barbers Hill was opened on May 21, 1926, by Mills Bennett and Humphreys Corporation Barber No. 1, which had an initial flow of 500 barrels of 33 gravity oil, from a total depth of 2245 feet. A total of six producers and five dry holes have been drilled near the discovery well.

Blue Ridge

The south flank of Blue Ridge was credited with a new sand when the Abercrombie Drilling Company West & Schenck No. 1 flowed 1500 barrels of 23 gravity oil from a total depth of 3281 feet. This well has continued flowing for five months with a slow decline. Two additional wells are now producing from this sand, and two other wells nearer the dome have probably missed it.

South Liberty

A productive area on the west flank of South Liberty Dome was opened by the completion of the Humble Oil & Refining Company Welder No. 2 in July 1926. This well was drilled to a depth of 3881 feet and had an initial flow of 2500 barrels of 22 degrees Baume oil. By the end of the year the pool had been extended 1200 feet south along the dome by five additional producers. These wells flowed initially from 250 to 2500 barrels.

Pierce Junction

The productive area on the west flank of Pierce Junction, discovered by the Rio Bravo Oil Company Settegast No. 1, in 1925, was extended to the northeast by the Bashara Bender No. 1 which was completed on August 18, 1926, for 1200 barrels from a total depth of 3528 feet. This well brought on closely spaced competitive drilling. Sixteen additional producers were obtained in this area ranging from 200 to 3200 barrels initial. A peak of 7650 barrels per day for this dome was reached the first week in November. The largest wells are being obtained south of the Bashara Bender No. 1 and development is proceeding slowly in that direction.

Markham Salt Dome

The Rycade-Humble Kountze No. 2, completed August 20, 1926, procured commercial oil on the southwest flank of Markham dome. This well had an initial production of 150 barrels of 29 degrees Baume oil from a total depth of 3605 feet. A second small producer was later obtained. Acreage here is held in large tracts and it is likely that further development will be slow unless larger wells are obtained.

In December the Houston Gulf Gas Company and John Deering Gray No. 2 came in as a gas well from a total depth of 3234 feet on the north flank of the dome. This well turned to oil about three days later and soon increased to a production of 694 barrels of 26 gravity oil.

High Island Salt Dome

The Sun Oil Company C-6 determined the presence of commercial production on the southeast flank of High Island dome in March 1926. This well had an initial flow of 345 barrels of oil with 8 per cent basic sediment, from a sand from 2341 to 2381 feet.

Kingsville Oil Field

Kingsville field was extended on August 24, 1926 one mile to the northwest by the Humble Kleberg Trustee No. 2. Seven wells are producing a daily average of about 575 barrels from a depth of 2000 to 2300 feet. The gravity of the oil ranges from 20 to 22 degrees Baume.

Brenham Salt Dome.

The north flank of Brenham dome was proven for production in December 1926, by the Pratt-Hewitt Oil Company Konieczny No. 1. This well is estimated good for about 50 barrels of 23 gravity oil from a depth of 1497 feet.

Lockhart

Lockhart field was extended during the past year about one-quarter mile to the northwest from the previous production. Nine producing wells were added in 1926 and the field maintained a rather consistent average of about 3300 barrels daily.

New Gas Area

The Refugio Gas Field in Refugio County, Texas, has been developed during 1926 by the drilling of 46 tests, 30 of which were gas wells. This has enlarged the proven gas area from one square mile to a field three and one-half miles long by one mile wide.

Geophysical Operations

The success of geophysical work in locating new salt domes in 1925 led to an active program in 1926 of seismograph and torsion balance work by most of the major companies. The seismograph work of reconnaissance type combined with previous shooting, covers a major portion of the Gulf Coast of Texas and Louisiana. A strip of territory along the coast about 70 miles wide extending from the Edna Gas Field in Texas on the west to slightly beyond the Napoleonville Salt Dome in Louisiana on the east, has been covered in reconnaissance by one seismograph party or another. The acreage embraced is approximately at 24,000 square miles. This has been supplemented by torsion balance surveys of local areas within this strip of territory. In addition both seismographs and torsion balances have surveyed lo-

A. I. M. E. PRODUCTION SYMPOSIUM FOR 1926

cal areas extending southwest to the Rio Grande.

This geophysical campaign has resulted in the discovery of the three salt domes. It is generally considered, judging from leasing activity, that at least one additional dome has been located; although it has not been proved by drilling.

The geophysical work of the year has shown that only a comparatively small number of undiscovered shallow salt domes existed within the general teritory of the known domes. Search for domes deeper than 3000 feet and for fields of structual type remain for future work.

The speed and accuracy of seismograph work was considerably improved by the adoption of radio for communicating the instant of explosion to the seismograph detectors. This permitted the computation of distances and made surveying unnecessary. It also gave a direct record on the film of the time of explosion, which had formerly been determined only by computations using the recorded air waves. Both surveying and computations of time of initial discharges had previously been a source of errors and delays.

The importance of knowing when a new salt dome had been discovered, or what areas had been covered by other companies, led many companies to strengthen their scouting system by men assigned to observe geophysical operations only. When scouts determined that a seismograph changed its work from reconnaissance to detail methods on a promising area, other companies would immediately move their seismographs into the area and quickly check the presence or absence of a salt dome.

Geophysical work has suspended much of the wildcat drilling on surface dome prospects and has enabled companies to release large amounts of unfavorable acreage. Nevertheless, some surface prospects are being drilled to attempt to discover structural fields, for it is generally recognized that with present knowledge it is difficult for seismograph or torsion balance reconnaissance to locate accurately a fold or fault buried beneath thick unconsolidated sediments. The torsion balance and seismograph have been applied to the outlining of the periphery of many known salt domes, but sufficient drilling has not been done to fully determine the value of such work; however, the results up to the present indicate that a considerable number of the holes necessary to determine the position of the edge of a dome can be eliminated by these surveys. The accuracy of this type or work is undoubtedly increasing materially with each additional dome studied.

Looking Forward

The Gulf Coast production by the end of the first three or four months of 1927 should have lessened considerably in amount and be gradually approaching its average level of the past five years, on account of the probable decline of flush production at Spindle Top. Of course, Spindle Top may possibly continue its output by discovery of deeper sands or extensions, or other fields may develop a quick flush; nevertheless, it is more probable that the Gulf Coast production will be mainly sustained by the output of a large number of small fields.

It is probable that geophysical work for 1927 will consist mainly of reconnaissance, principally by seismograph, in regions extending well beyond the known salt domes. Search by detail work for fields of structural type and for very deep salt domes will be given attention. Known domes will be detailed with increased accuracy.

No estimate is hazarded as to the number of domes that will be discovered by geophysical methods, yet it is believed that the discoveries of 1927 will not greatly influence the production figures for the Gulf Coast for 1927.

It is probable that new drilling operations will be largely confined to developing flank production on salt domes. Rapid development may be expected only where productive acreages is cut up into small tracts. However, nearly 50 per cent of the domes are held in fairly large tracts, and accordingly on these domes development can be carried with sufficient care to permit efficient operation and to aid in preventing over-production.

Oil Resources of Oklahoma and Kansas in 1926

By HENRY A. LEY

Oklahoma

Henry A. Ley, general manager of The Elmwood Oil and Gas Company, reviewed developments in Oklahoma and Kansas, and his paper "Oil Resources of Oklahoma and Kansas in 1926," covers the situation in detail. He says:

Prospecting in Oklahoma and Kansas during 1926, revealed new prolific fields, and focused attention on constantly enlarging areas worthy of further testing. In these latent borderland areas are the major fields of the future which will enable Oklahoma and Kansas to maintain their consistent oil producing record for a number of years to come. Oklahoma production for 1926 exceeded that of any preceding year, while Kansas reported its second consecutive annual increase. New production in Oklahoma was largely from zones or horizons of the pre-Chattanooga age, below the Mississippi line. In Kansas, on the other hand, new production was largely from "'pays", in the Pennsylvanian above the Mississippi line. Oklahoma closed the year with an average daily production of 571,045 barrels and Kansas 116,400 barrels, as compared with 447,645 barrels and 101,410 barrels, respectively at the beginning of the year.

Approximately 179,390,000 barrels of crude oil was produced in Oklahoma during 1926, an increase of about 3,000,000 barrels when compared with the record year of 1925. Average daily production, month by month, followed the general curve of 1925 rather closely, but was consistently less until the week ending October 23, when it crossed 500,000 barrels, reached a maximum of 571,045 barrels per day for the week ending December 31. At the close of the year there were 10 fields in Oklahoma, each producing more than 2500 barrels daily, showing appreciable increase above production reported January 1, 1926. These 10 fields reported a production of 103,300 barrels on January 1, 1926, and 312,025 barrels on January 1, 1927. Production of a number of these fields is still on the upward trend. Although Oklahoma retains its rank of second place among oil producing states for the year 1926, Texas average daily production advanced ahead of Oklahoma in the week of September 18, and the latter fell in rank from second to third among oil producing states for the remaining weeks of 1926.

The 1926 production total was made possible by the discovery of one new district during the year, and development of five pools found in the closing months of 1925, all affording large flush production of high gravity from pre-Chattanooga zones.

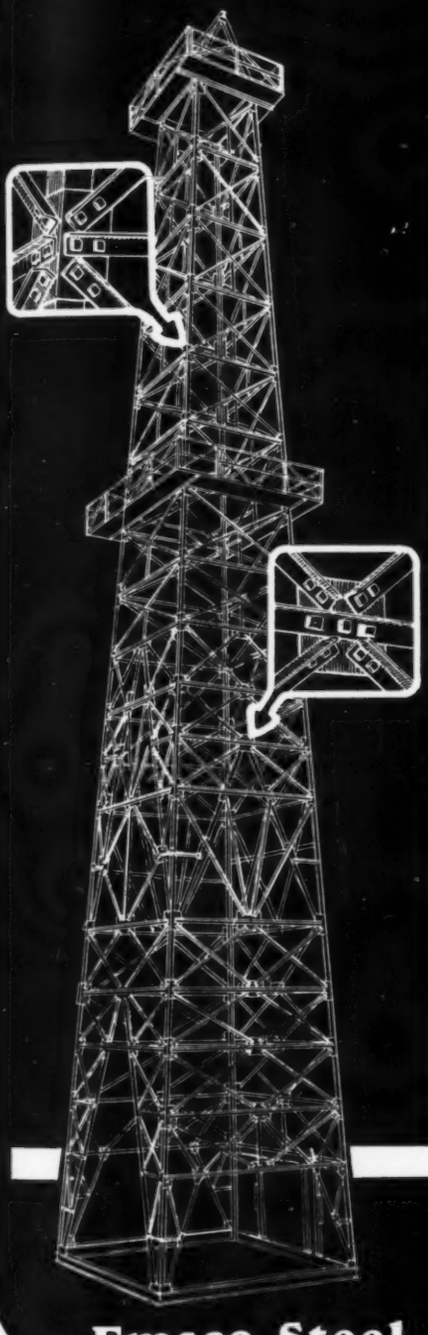
New Discoveries

In the Seminole, Earlsboro, Searight district of Seminole and Pottawatomie Counties were made the only important discoveries of the year in Oklahoma. The other five pools mentioned above are: Wewoka in Seminole and Hughes Counties; the Olean pool in Payne County; Deep Rock in Payne County; and the deep pays of North and South Braman in Kay County.

Wewoka and Seminole deep sand discoveries extended the limits of possible pre-Chattanooga production 30 miles southward and an indefinite distance northwestward during the year, thereby creating much promising territory. Less than 1/20th of the entire area of

EMSCO
A Complete Line of Better Oil Well Equipment

EMSCO DERRICKS ARE BUILT TO STAND UP



Superior construction throughout is a marked characteristic of every Emsco Steel Derrick. They are built to stand up under every stress of deep drilling and to withstand the effect of fire, wind and deterioration—in one of the most modern derrick manufacturing plants in the world.

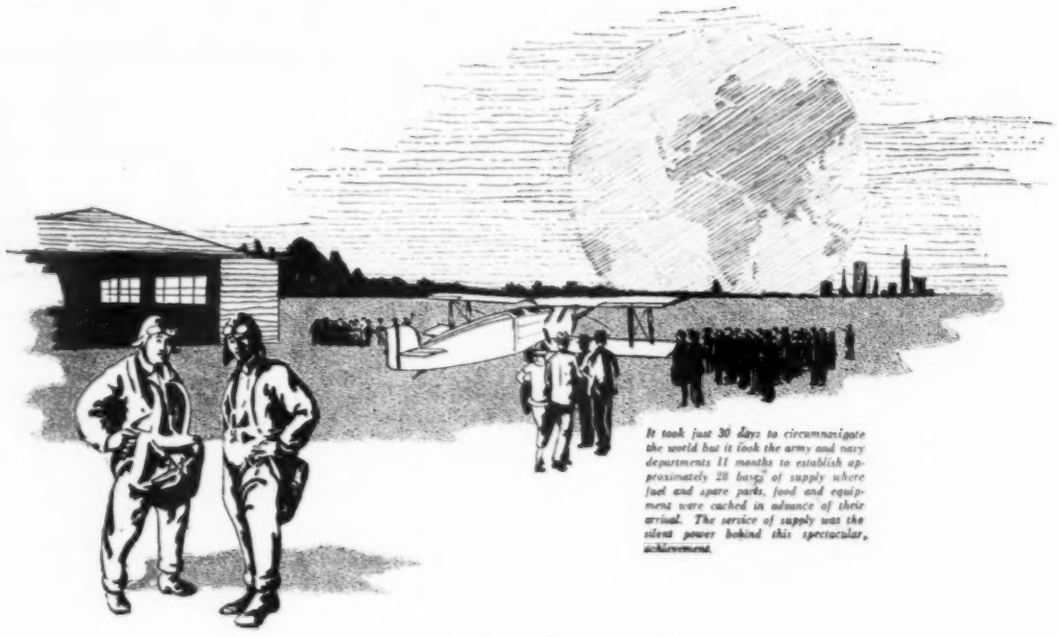
Emsco derricks have large braces between every girt. Gusset plate and two bolt construction is used throughout, from the crown to the foundation, insuring the ultimate in structural strength. All types of 84', 94' and 122' production, drilling and dual derricks carried in stock for immediate shipment.

The Emsco Type "R" 122'—84' Dual Derrick, easily converted to a pumping rig by lowering the 84' top section to foundation and moving lower section to another location. Furnished in calf wheel and window types. Specifications on request.

EMSCO
Derrick & Equipment Company
of Texas
Houston, Texas
Los Angeles, California
New York Office, 150 Broadway

Emsco Steel Equipped Wells are SAFE

The Internationa



It took just 30 days to circumnavigate the world but it took the army and navy departments 11 months to establish approximately 28 bases of supply where fuel and spare parts, food and equipment were cached in advance of their arrival. The service of supply was the silent power behind this spectacular achievement.

The world of flight . . . the flight to the pole . . . and now the Pan-American flight . . . all trace back for success to the source of supply. So also does success in the oil business rest, to a very considerable extent, on the source of supply.

Because International early recognized the absolute need for a dependable source of supply, near field activity, our stores have kept pace with the oil development in the Southwest.

And International stores, located at strategic points, are supply bases for those of you who are daily pushing ahead the oil frontiers.

With a great organization of trained men, backed by the largest tool manufacturing plant . . . the Oklahoma Iron Works, of Tulsa . . . in the Mid-Continent field, we offer to you a supply service second to none.

And, on the opposite page, are listed a number of the leading products used in the Industry, every one selected carefully on the basis of outstanding quality.

Service of Supply

The list below covers only a few of our lines, just enough to prove that when you put your supply problems up to International you will be furnished products that you may accept with full confidence.

Kewanee Code Boilers

Goodrich Rubber Co., "Highflex" Belting and mechanical rubber goods.

American Wire Lines

Youngstown Tubular Goods

Jefferson Unions

O. I. C. Valves

Darling Valves

Gardner Pumps and Compressors

Franklin Drilling Engines

Burt Swabs

Lucey Rotaries

Spang Jars

Bell Spooling Flanges

Bells Time Saving Swivel Sockets

Isco Steam Drilling Engines

Kohler Gasoline Lighting Plants and "EVERYTHING FOR THE OIL FIELD."

From the Oklahoma Iron Works:

Drilling and Fishing Tools,

Full A. P. I. Rig Irons,

Steel Crown Blocks, Sand Reels, and the famous line of "ISCO" heat Treated Pins on Bits and Jars.

Prosser and O. K. Swivel Sockets

M. & F Steel Nipples

Drive Clamp Bolts, Inserted Boxes, Casing Shoes, Burt Swabs, Wrist Pins, etc.

INTERNATIONAL SUPPLY CO.
TULSA INTERNATIONAL ISCO SUPPLY COMPANY **OKLA.**

A. I. M. E. PRODUCTION SYMPOSIUM FOR 1926

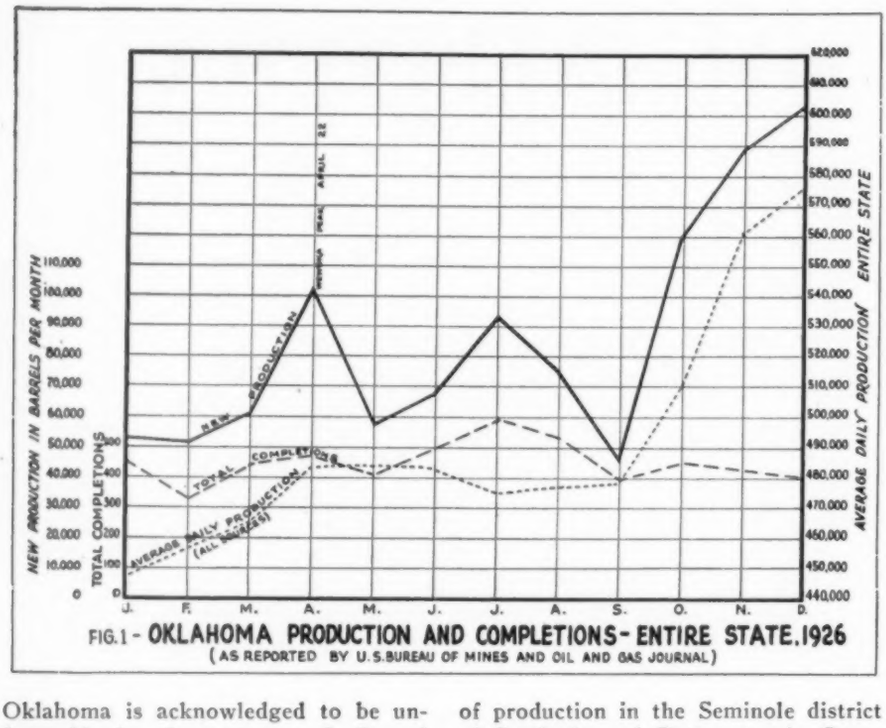

NEW PRODUCTION IN BARRELS PER MONTH
TOTAL COMPLETIONS
AVERAGE DAILY PRODUCTION ENTIRE STATE
NEW PRODUCTION
TOTAL COMPLETIONS
AVERAGE DAILY PRODUCTION (ALL SOURCES)
J. F. M. A. M. J. J. A. S. O. N. D.

FIG.1 - OKLAHOMA PRODUCTION AND COMPLETIONS - ENTIRE STATE. 1926
(AS REPORTED BY U.S. BUREAU OF MINES AND OIL AND GAS JOURNAL)

Oklahoma is acknowledged to be unfavorable for the presence of oil, and less than 1/40th of its entire area is either of proven producing or of proven undeveloped classification. Under these conditions the drill is bound to have further surprises in store. Large subsurface structures affording pre-Chattanooga production are found from the Braman pools near the Kansas-Oklahoma boundary south to Seminole and Wewoka, a distance of about 130 miles, and from Garber eastward to and including Cushing, a distance of about 60 miles. There are no known reasons why in this area of 5000 square miles or more there should not be similar structures of equal or even greater magnitude, similarly folded, faulted, or truncated and similarly productive.

Major Fields Declined

Production of the major fields of 1924 and 1925, declined throughout 1926, except the five fields mentioned above in which deeper drilling supplied new flush production. With one exception, the smaller pools of the western province of this state, including the Garber, Tonkawa, and Thomas fields, continued the declines established in 1925. Deeper drilling at Hubbard to pre-Chattanooga horizons increased production from about 2000 barrels on January 1, to more than 6000 barrels daily at the close of the year. Osage County production increased slightly through the year, but failed to report either important discoveries or extensions to present producing area.

Seminole District

In less than six months four centers of production in the Seminole district of Seminole and Pottawatomie Counties have built up a daily production exceeding that of any other important Oklahoma district, except Cushing-Drumright. Cushing is believed to have reached a peak of 331,000 barrels daily; Burbank reported a peak of 121,000 barrels daily; and Tonkawa, 113,000 barrels. The 1926 peak of Seminole production was reached on December 24, when 129 wells put 152,037 barrels into tanks. For the year 1926 the district produced approximately 8,190,000 barrels. On January 8, 1927, the district reported 172,880 barrels, of which the 9-6 area contributed in excess of 120,000 barrels, the 10-6 area more than 40,000 barrels, and the 8-6 area about 10,000 barrels. Six months will probably elapse before inside locations and indicated extensions are fully drilled. Meanwhile average daily production will likely cross the 200,000 barrels mark. Liberal use of compressed air in the 9-6 area, rather than new completions, has of late been the most important factor in steadying and building up Seminole City production.

The four producing areas of the Seminole district are: Seminole City, Searight, Earlsboro, and the I. T. I. O., development now centering about Sec. 13-8-6e. Production is found in the "Wilcox" sand, Hunton lime, and shallower sands.

Looking forward, but keeping constantly in mind the most important contributing factor of the past, the nearby outlook for 1927 indicates an ample supply of crude to meet new demands. Price structure for a greater part of the coming year should stabilize at or around present quotations. Exploration activity will probably lessen, because areas, of sufficient geologic merit to warrant testing, are diminishing in number. The discovery of new major pools at any time during the coming year would make the immediate outlook not only uncertain but also unfavorable. On the other hand the longer range outlook is decidedly favorable for the producer. Predicting the trend of production and of prospecting activity of these two states for the coming year is quite hazardous, yet it may be stated with considerable certainty that unless Oklahoma discovers new pools in pre-Chattanooga horizons during 1927 it will not produce as much crude as in the year just passed. Kansas, however, should maintain its average daily production of the past two years. Production in the Seminole district will undoubtedly encourage deeper drilling in Hughes, Seminole, Pottawatomie, Cleveland, Oklahoma, Lincoln, Logan and Kingfisher Counties.

Kansas

Kansas average daily production for 1925 exceeded that of the six preceding years.

New production was largely from Pennsylvania sands and limes of pools

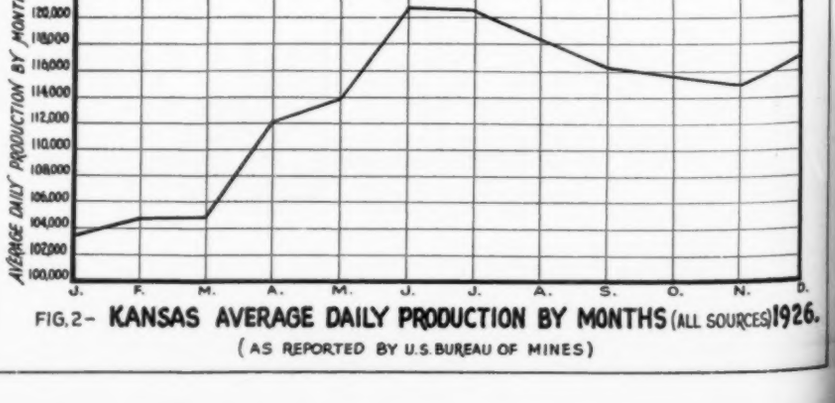
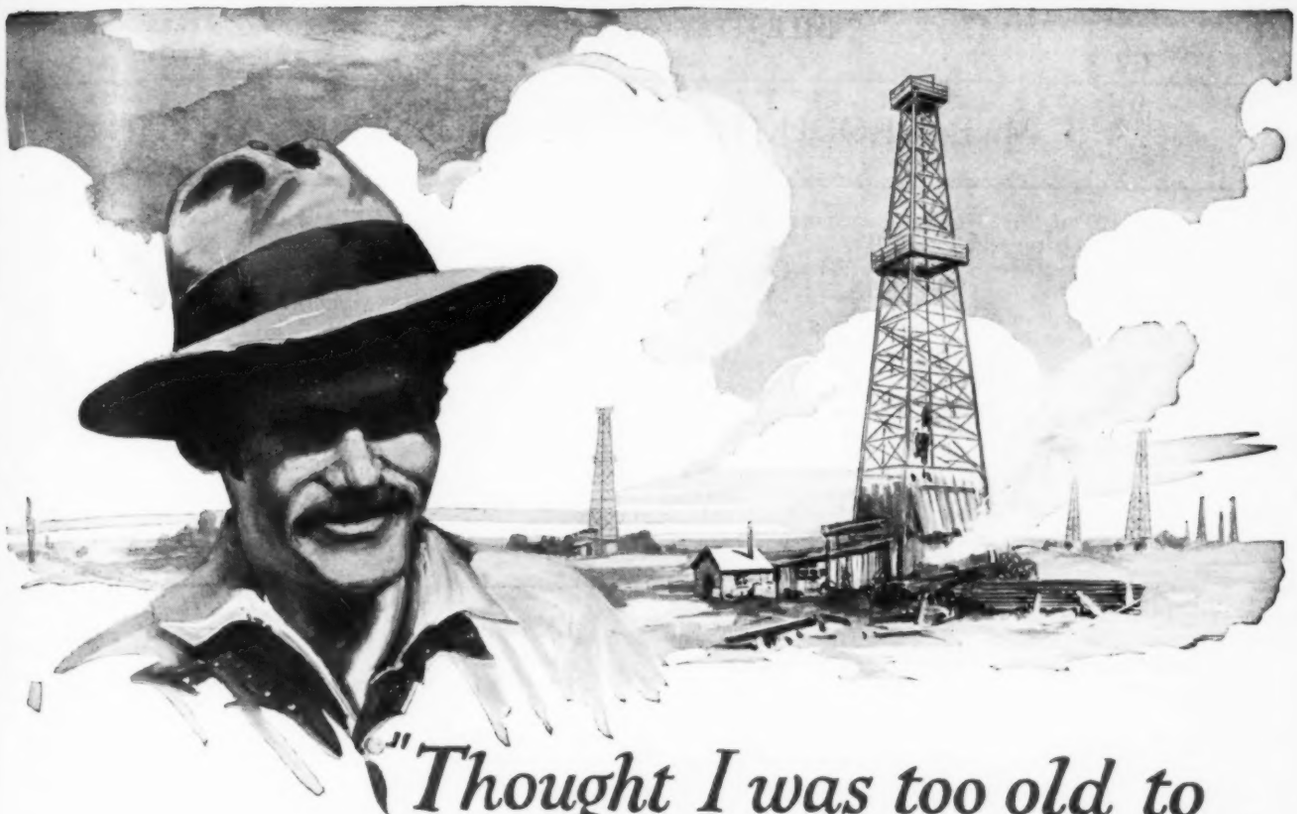


FIG.2 - KANSAS AVERAGE DAILY PRODUCTION BY MONTHS (ALL SOURCES) 1926.
(AS REPORTED BY U.S. BUREAU OF MINES)



"Thought I was too old to learn any new tricks, but-"

"after watching my next door neighbors make hole with a Franklin Valveless Oil Drilling Engine I'll have to admit that my old biler ain't in it for speed or economy, compared with that Franklin Valveless.

"We both spudded in the same day, yet they were passin' the 2000 ft. mark when my outfit was bangin' away at 1800. And what it's cost them to run that engine wouldn't keep my boiler hot for a week.

"I always had the idea that those oil and gas engines weren't flexible enough to do a good job of drilling, but the way that Franklin picks 'em up and lays 'em down suits me. No water to carry, no fires to tend, and they hauled the whole she-bang out here on one truck!

"If you hear of anybody that wants a steam outfit, let me know. He can have mine cheap. I'm getting a Franklin Valveless."

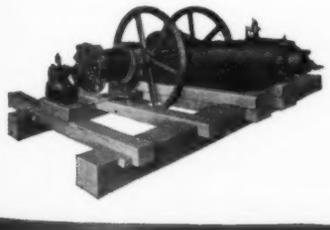
Approximately 90% of Franklin's sales have come through repeat orders from satisfied users or from drillers who have watched these dependable, economical engines on the job.

Get in touch with the nearest distributor and ask him to drive you out to a well drilled or pumped with a Franklin Valveless.

Franklin Valveless Oil Engines are sold complete with Self Oiling Reversible Drilling Clutch, Blower and Fuel Tank.

Mid-Continent and Western Type
Price $3700.00
Eastern Type
$2600.00 and $3,350.00

F. O. B.
Franklin, Penna.



FRANKLIN VALVELESS ENGINE COMPANY
FRANKLIN, PENNA.

Distributed by

Atlas Supply Company, Muskogee, Okla. and Branches
New Martinsville Supply Co., New Martinsville, W. Va.
Wooster Tool & Supply Co., Wooster, Ohio
Bradford Sales Company, Bradford, Penna.
International Supply Company, Tulsa, Okla. and Branches
Atha Supply Company, Zanesville, Ohio
Washington Engine & Pump Co., Washington, Penna.
McEwen Brothers, Boliver, N. Y.
The American Tank Company of Colorado Casper, Wyoming

FRANKLIN
VALVELESS ENGINES

THEY BEAT STEAM AT EVERY TURN

A. I. M. E. PRODUCTION SYMPOSIUM FOR 1926

located on and east of the Granite Ridge. It is in this territory that the pools and fields of consequence are apt to be discovered in the near future—at least it offers promising possibilities. Outstanding developments of 1926 in this district were the Churchill pool of eastern Sumner County, the Kramer pool of Butler County, and the Webb pool of Elk County. Important extensions and intermediate pools of Bartlesville sand were discovered in Greenwood and Butler Counties. Western Kansas, and particularly the Kingman district which promised to develop into a pool early in the year, failed to contribute a single new pool or field. At present the outlook for immediate production increases from this territory is not promising, yet the stratigraphic section and subsurface structure forecast the eventual discovery of important fields.

Completions increased from 1523 for 1925 to 1879 for 1926. Of all completions, 1093 were oil wells; 43 gas wells, and 743 dry holes. Total initial production for 1926 fell more than 30,000 barrels from 1925 estimates.

Developments in the Oil Industry in the Rocky Mountai n Region During 1926

By FRED E. WOOD

Fred E. Wood, petroleum engineer for the Midwest Refining Company, Casper, Wyoming, outlined principal achievements in the Rocky Mountain region in his paper "Developments in the Oil Industry in the Rocky Mountain Region During 1926." Extracts follow:

During the year 1926, eight discoveries were made in new fields or in new sands in old fields in the Rocky Mountain region. These include five light oil and two black oil discoveries and one gas discovery. No estimate can yet be made regarding the potential increase in production as a result of these new productive sands.

During the past year, three carbon black plants have been erected, one each in Wyoming, Montana and Utah.

There have been six new gas lines and three new oil lines laid in the Rocky Mountain region. Two of the gas lines were laid in Wyoming and four in Montana. A new oil line has been constructed in each of the following states: Montana, Wyoming and New Mexico.

The entire Rocky Mountain region in 1926 produced 37,363,290 barrels as compared to 35,390,970 barrels in 1925. This is an increase of 5.6 per cent. Kevin-Sunburst enjoyed rather intensive development and as a result its productio increased from 2,660,000 barrels in 1925 to 6,415,000 barrels in 1926, a gain of 140 per cent. Craig and Fort Collins districts in Colorado showed greater production in 1926 than previously, the former because of the construction of a pipe line which provided an outlet for the crude and the latter district on account of new development. As a result of new development, New Mexico fields showed an increase in production in 1926 over 1925.

Development in the Rocky Mountain region in the past has been almost entirely confined to closed structures and it has been this type of fold which has yielded the best results. In the future it may be possible that a new type of structure will be found to be productive, although a considerable amount of intelligent wildcatting will have to be done before any conclusive results can be determined one way or another. Undoubtedly more fields will be found and the potential production of the region increased materially as a result. Present producing sands in this territory, with the exception of the Lakota, Sundance and Morrison sands in Salt Creek, are almost completely developed, so that from the total production standpoint, the future will probably see a continued decline unless a new field of major proportions is brought in.

Review of Petroleum Production in Arkansas and Northern Louisiana

By H. D. EASTON, et al

H. D. EASTON et al bring out in their "Review of Petroleum Production in Arkansas and Northern Louisiana during 1926," the three new producing areas added last year. These included the Urania field which produced 4,142,659 barrels; the Bradley field, estimated at 25,480 barrels, and the Lisbon field which yielded 2,457,947 barrels.

The oil produced in Arkansas and Northern Louisiana during 1926 was as follows:

Arkansas	58,809,314	Barrels.
North Louisiana . .	19,902,385	"
Total	78,711,699	"

The total for both states during 1926 is approximately the same as that for Arkansas alone during 1925; both states fell off in total production, Arkansas dropping approximately 20,000,000 while North Louisiana lost about 1,700,000 barrels.

The prolific sands discovered in the Smackover field lying between the Nacatoch and the Blossom (Meakin and Graves) and representing what is the Annona Chalk zone farther south, brought Arkansas up to its peak during 1925. This peak of production was reached in May and passed in late June of that year.

Petroleum Development in California During 1926

By JOSEPH JENSEN

JOSEPH JENSEN, chief geologist, Associated Oil Company, lists the outstanding events in California during 1926, as follows: Discovery of a new field at Seal Beach; intensive development of a separate structure in Huntington Beach field in the townsite area; important extensions in the Ventura Avenue field; extension and development of the Kraemer sand in the Richfield field; discovery of a new field at Poso Creek; curtailment of development of a deeper zone in the Inglewood field; disastrous development of the Los Cerritos extension of the Signal Hill field; finding of oil sand in the Cypress wildcat well in the Potrero district, midway between Inglewood and Rosecrans fields; finding of oil sand in the Smith well west of Hawthorne; drilling to a depth of 8046 feet in the Brea Olinda fields; completion of commercial wells in the Ventura Avenue field to depths of 6800 feet and completion of other wells in the same field where the top of the oil zone is nearly a mile below the surface; stabilizing and sustaining of production due to the use of gas-lift and gas-drive methods in various fields.

Mr. Jensen points out that "conditions in California at the end of 1926 are so strikingly similar to those that existed at the end of 1922 that there is good reason for wondering as to whether or not production in the year 1927 will be similar to production in the year 1923.

"By December 1922, California pro-

(Continued on page 148)

He Helped Drill the First Oil Well

SAMUEL SMITH OF TITUSVILLE
As he is today at 83

By HARRY BOTSFORD

HE is eighty-three years of age: a stalwart, intelligent and active man with a quick smile and a keen blue eye. He looks to be about 60 years of age. He is the only living man who helped to drill the first artesian oil in the world. He lives in Titusville, Pennsylvania, and his name is Samuel Smith.

Few men at the age of 83 are still active mentally and physically. Samuel Smith is an exception. Aside from a slight impairment of hearing he is sound as a nut. All his life he has been working; never a day passes but that he is engaged in some endeavor which requires physical effort, deftness of hand. Today I suspect that he could outwork, day after day, thousands of men half his age.

Samuel Smith came to Titusville from Tarentum with his father, William Smith, at the invitation of Edwin L. Drake, for the express purpose of drilling an artesian well at the site of the famous old oil spring near the saw mill of Brewer, Watson & Company located on the banks of Oil Creek.

Drake had come to Tarentum and had made arrangements with a number of salt well drillers to come to Titusville but all had failed to live up to their agreement. On the advice of a certain Tarentum man, Drake approached William Smith. Now it is commonly supposed that William Smith was an experienced salt well driller. This alleged fact is frequently quoted in the histories of petroleum. Such was not the case.

Smith was a Smith

"My father was not a driller," Samuel Smith told me. "He was a blacksmith who spent much of his time in making drilling tools and fishing tools for the salt well owners. As such he was in great demand. He was a skilled mechanic in every respect. Before coming to Titusville he had no practical experience in drilling. What knowledge he had was purely instinctive. He had made special fishing tools at Tarentum and the drillers often came to him for advice. But when it came to drilling he had never had any actual experience."

Smith, senior, listened to Drake's story. He rather liked Drake, a quiet, gentlemanly, intense man. He agreed to come and do his best. He brought with him all of the drilling tools used in drilling the well, his blacksmith tools, part of his family—including Samuel Smith, aged sixteen, a husky, hearty lad who welcomed the move.

When they arrived in Titusville they immediately moved into the engine house built on the site of the "oil spring." Another engine house was erected.

The story of the drilling of the first artesian well has been told frequently and with many variations.

The work proceeded under the direction of his father. Drake, himself, was mostly in the background, very chary with suggestions and mostly concerned with the serious and rather difficult business of securing sufficient money to meet the payroll.

A pit was dug down through the subsoil to a depth of 16 feet. It was hard work and at last had to be abandoned at that depth because of the inflow of water that could not be pumped out. In the meantime a little six horse-power steam engine and a long,

LUFKIN units with~s

When the fire was at its height—showing the derrick No. 3 melting down.

Another view of the fire—the melting derrick is shown just to the left of the column of smoke.

It was 3 o'clock in the Morning of Nov. 4th....

The Rio Bravo Well No. 53 was just being finished when suddenly FIRE! — the dread destroyer had struck — soon the wooden derrick was completely enveloped in flames.

To the right and left were wells No. 3 and No. 5, both equipped with steel derricks and LUFKIN UNITS. They were further endangered, unfortunately, beyond their close proximity to the burning well by a considerable amount of wood, including a wooden motor house. The steel derricks writhed and twisted under the intense heat that finally reduced them to a shapeless mass of debris—but the LUFKIN UNITS survived.

Lufkin Units Survive....

The pictures on this page show the fire when it was raging and the LUFKIN UNITS that were found to be in good shape after its devastating fury was spent. Such pictures as these tell a truer story than can be written.

The units shown here were on wells No. 3 and No. 5 on either side of the burning well.

After the fire, although the motor was damaged, the units were found to be in good working condition. They were carefully inspected — the oil was intact and the bearings were not dry. There was nothing else to do but put a new motor on and start them up. They are now in operation.

Manufactured at Lufkin, Texas, by

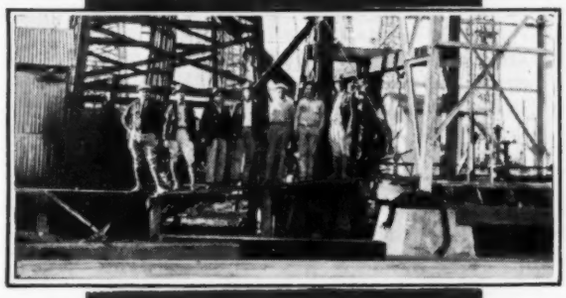
LUFKIN
FOUNDRY & MACHINE CO.
Eldorado, Ark. Tulsa, Oklahoma.
Houston, Texas Los Angeles, Cal.
New York, N.Y.

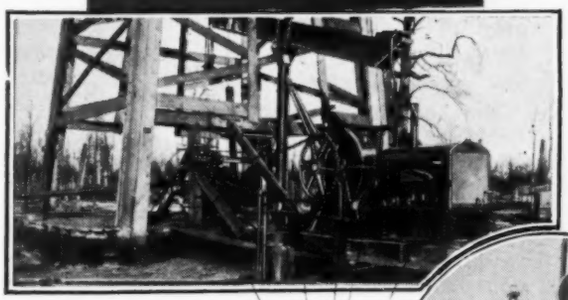
~stand the Beaumont fire

Over 60 Lufkin Units Here....

The picture above was taken the day after the fire, and shows the Atlantic lease and part of the Gulf leases, which are all equipped with LUFKIN Units. There are more than 60 units in this field altogether, and are performing to the utmost satisfaction of the users.

The picture to the right above shows in the front Gulf Weed No. 4, which is 4,200 feet deep. This picture also shows a number of other wells, equipped with LUFKIN UNITS, nearby.





LUFKIN Rod and Tubing Hoist.
Chain — attached for pulling — detached when drilling or pumping.
Worm and Gear.
Counter Balance Crank.
Buda 75 H. P. Engine

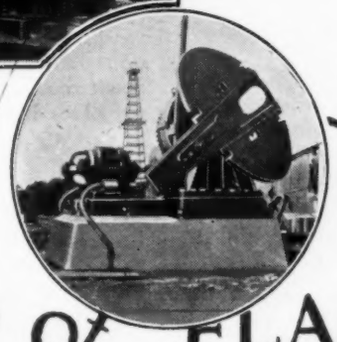
Southern Crude Oil Purchasing Co., Smackover, Arkansas.
Heavy Duty—75 H. P. Buda 6 ft. stroke.

Production Costs Kept at a minimum

The center picture is a group of good fellows we would like to introduce to you; they are standing on Atlantic No. 4. Reading from left to right: Ward Yocum, Material Man; C. J. Mitchell, Drilling Supt.; G. H. Gunn, Const. Eng.; Mr. Ed Slaughter, Engineer; Jack Keeble, Asst. Supt.; W. D. Stampfly, Gen. Supt.

Oil companies realize that production costs must be kept at a minimum. The first cost of the LUFKIN Unit is no greater than the cost of a standard rig; the LUFKIN Units, with LUFKIN loose drum hoist, cuts the time—no reversing—continuous power—also built for handling rods and tubing at high speed to save time. The LUFKIN Unit may be operated by an electric motor or by a multi-cylinder gas engine, thereby assuring the minimum operating expense.

Amerada, Wewoka, Fredericks No. 4, Heavy Duty, 6 ft. stroke, 20-50 General Electric Motor.



The LICK AND LAP of FLAME

Hold no Terrors for LUFKIN All-Steel Equipment

The LUFKIN Unit, with its "Fireproof Installation," is fire-resistant. The equipment is made of steel and concrete. LUFKIN has NONE of these fire hazards:

1. No wooden derrick, which soaks up oil.
2. No wooden belt house and wooden engine house.
3. No wooden rod-walk.
4. No rope lines which absorb oil.
5. No static electricity from power belts.

Fire insurance premiums are reduced Three per cent. when LUFKIN fire-proof installations are used.

Reduce your fire losses by using a LUFKIN Unit with its "Fire-proof Installation."

Manufactured at Lufkin, Texas, by

LUFKIN
FOUNDRY & MACHINE CO.

Eldorado, Ark *Tulsa, Oklahoma*
Houston, Texas *Los Angeles, Cal.*
New York, N.Y.

queer-looking boiler had arrived from Erie and were installed.

Drive Pipe

The pressing difficulty was to drill through the sand that persisted in constantly caving in. At this point Samuel Smith gives us some information that again spikes an alleged fact in current petroleum history. It has been said that the idea of using drive pipe was Drake's.

"The drive pipe was used at the suggestion of my father," Samuel Smith told me with a twinkle in his eyes. "While drive pipe wasn't used very often around Tarentum, it was used. Therefore it was natural that my father would suggest it. The real difficulty was to get the pipe!"

And, indeed it was a real difficulty. The pipe, Mr. Smith suggests, came from Erie. But he is not certain. He is not a man given to making statements he is not sure of. The first pipe was two lengths of 15-foot pipe, four inches in diameter. This was driven through the sand but failed to reach rock. More pipe was needed and larger pipe. Drake agreed to get the pipe although he deplored the delay it would cause.

William Smith, by this time, had fallen in love with the little village tucked away in the Oil Creek valley; it was a small place of only a few hundred inhabitants, a few hotels and three general stores. But it suited William Smith. And Samuel Smith voted with his father.

"While you are getting in the new drive pipe, I'll go back to Tarentum and move my whole family and goods up here," William Smith told Drake, and Drake agreed that it would be a wise move. So the Smiths returned to Titusville with the idea of making it their home.

The new drive pipe arrived. It was driven down through the soft and troublesome sand to a depth of 47 feet where rock was encountered. The pipe was cleaned out in less than a week. Then actual hard-rock drilling started under the direction of William Smith.

Saw Oil First.

At a depth of 69½ feet Samuel Smith, aged sixteen, looked down the mouth of the drive pipe and called his father's attention to yellow foam on the top of the fluid in the hole. "That's oil!" said William Smith laconically. Interested but unexcited he pulled out the tools and at once rigged up a crude pump that had been used when they had attempted to exhaust the inflow of water into the hand-dug pit — and a rush of greenish yellow oil resulted.

The world's first oil well had been drilled and the vein had been tapped!

"I suppose Drake was wildly excited and that there were big crowds around the well in no time?" I asked.

Samuel Smith leaned back in his wicker chair and smiled quietly. "As a matter of fact Drake was away at the time and didn't come for a day or two," he answered. "And crowds? Not for several days!"

And there you are! Samuel Smith in telling of the affair takes away much of the old-time drama and mystery that has surrounded the work, but he makes the affair seem real, lifelike and you instinctively know that his story is not even slightly embellished.

Did William Smith or his son profit by the sudden and tremendous flood of wealth which they released to the world? Yes—and no! It all depends on how you look at it.

Never Invested in Oil

"My father was a peculiar man," Samuel Smith says pridefully. "He never cared much for money. While he was working for Drake at a wage of $2.50 a day he turned down chances to work elsewhere for $4.00 a day. He never invested in oil property and he would never consent to pass his opinion on oil property unless much pressed. In fact he drilled but very few wells after the Drake well. The nearest he ever came to cashing in on his experience was when he was prevailed upon to take a trip in the Scuth for some oil men and to report to them the prospects for oil in that territory. He received $8 a day for that trip and he told them very plainly that he would be unable to give them any definite or concrete data from surface conditions only."

"And yourself?" I inquired. "Did you ever own oil property?"

He shook his head. "I pumped the Drake well for three years," he replied. "But the work was pretty dirty and I didn't care for it. I wanted to be a mechanic or a carpenter. So I have spent most of my life at carpenter work. For many years now I havn't done much carpenter work but have spent most of my time working around my place here."

And his home is a comfortable one surrounded by a big expanse of neat grounds that in the summer are extensively cultivated. In Titusville, Smith's flowers and early vegetables have a splendid reputation and his gardens are models of neatness: straight rows, weedless rows and the ground is stoneless.

Maybe Samuel Smith didn't make a fortune out of the magic flood of wealth he helped release—at least he didn't make a fortune of money. But life has given his something else of greater value: a strong, virile body, a youthful mind, perfect health and an independence that comes of being able to do useful work. And at 83 perhaps these things are of more value than a vast hoarding of wealth!

At his invitation I visited his work shop. It is a good-sized frame building located on a knoll back of his home. Long windows make the room bright and cheerful. In the center a big wood stove squats and glows genially. The walls are decorated with neat and orderly rows of tools and implements of his trade: tools and implements that are bright, shiny, sharp — that show evidence of frequent use. There is in the air a fragrance of pine shavings—it is just the sort of a shop that I would like to own.

Samuel Smith is at home in that shop. He reaches up and touches a tool and in his touch there is something that is almost reverent—for he knows tools and how to use them. He opened a drawer and bent his white thatched head over its neat array of items and showed me a pocket knife he had made when he was a youth—a perfect piece of workmanship and all handmade and forged. "I even ate the meat that once covered that bone handle!" he chuckled.

An Interesting Anvil

He strode to one corner of the shop and returned with something in his hand. It was a small anvil, weighing perhaps five pounds. "That," he said slowly, "was made from the reamer that helped to drill the first oil well. My father made it with his own hands."

A good piece of work! Just a piece of black, stolid iron fashioned into a practical and convenient little anvil. He values that little anvil and I don't blame him. Perhaps there are oil men who would give its weight in gold to own it. I suspect Samuel Smith would reject such an offer.

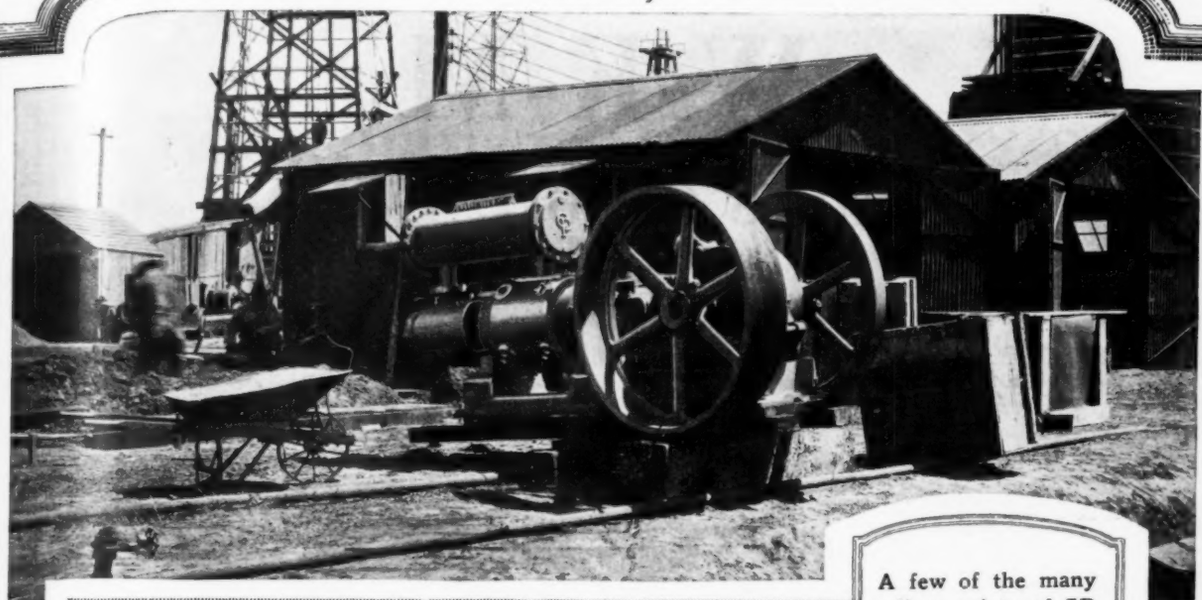
On the bottom it is still possible to distinguish the old features of the reamer. We measured it: one and a half-inches across.

"The drilling tools were all that size," Samuel Smith says. Yet the writer knows of a certain collection of drilling tools recently displayed at Tulsa to the members of the American Petroleum Institute as the "original" tools used on the Drake well. These tools are two-inch tools. If Samuel Smith enters the claim that the tools were only inch and half in size I am inclined to suggest that perhaps the two-inch tools are not exactly authentic.

A great man, this Samuel Smith! There is nothing of the boaster about him. He is not inclined to magnify his service to mankind just because he helped to drill the first artesian oil well. On the other hand he is honest enough and intelligent enough to realize that it was an achievement of high caliber. Yet I doubt if he would freely admit it. To him it was simply a contract filled. All his life he has been filling contracts—to the last letter.

His physical capacity is amazing. Just the other day he mounted his bicycle and rode several miles out in the country and only curtailed his ride because he found the roads rather icy! He can swing a pick or a shovel with a deftness or smoothness that is wonderful. When he walks his step is youthful, full of zset and power.

(Continued on page 172)



One of 12 CP Air Compressors, Simplate Valve equipped, being installed by a large Mid-Continent Oil Company.

C P Air Compressors for Oil Field Work

Chicago Pneumatic Air Compressors Type N-CTB are popular machines for oil field work, and particularly for flowing oil wells because of their economy and dependability.

One of these CP Compressors is delivering 600 barrels of oil daily from a well that had been abandoned. It is not unusual to hear reports of increases in production up to 300% when Chicago Pneumatic Compressors are used for flowing oil wells.

It costs you nothing for a conference with CP Engineers. Full information furnished on request to any branch or agent.

A few of the many salient points of CP Compressors.

Wide range of cylinder combinations adapting the unit to any range of pressures ordinarily required—all interchangeable—quick changes in existing installations.

Easily installed—simple foundation.

Compact—often mounted on skids, together with motor.

Easily moved from one location to another.

Units adapted to battery installation for centralized control.

All CP Compressor parts are standard and are stocked at conveniently located branches.

CHICAGO PNEUMATIC TOOL COMPANY

Sales and Service Branches all over the World

6 East 44th Street New York, N. Y.

WHEALTON-TOWNSEND CO., INC.

Higgins Bldg., Los Angeles *Authorized Distributors* 120 East Brady St., Tulsa

LITTLE GIANT PNEUMATIC AND ELECTRIC TOOLS — CHICAGO PNEUMATIC AIR COMPRESSORS
ROCK AND COAL DRILLS VACUUM PUMPS — OIL AND GAS ENGINES PNEUMATIC HOISTS
TOOL BALANCERS CONDENSERS — BOYER PNEUMATIC HAMMERS

CHICAGO PNEUMATIC

Say you saw it in The OIL WEEKLY

W-K-M
Offers a Core Drill
with
Detachable TOOL STEEL Cutters

Heavily stellited, tool steel cutter blades enable the W-K-M Core Drill to make two or three times as much hole as a fish-tail bit, and to take perfect cores in the hardest formations ordinarily encountered.

AT first glance, this new W-K-M Core Drill is going to appeal to you immensely. For the first time in the history of rotary drilling, as far as we know, you can now match heavily stellited, detachable tool steel cutter blades against the dozens of tough formations you always have to cut through in digging for pay.

Results? Just what you'd naturally expect.

Capacity to cut through and take perfect cores, in all rock formations ordinarily encountered. Capacity to make three to five times as much hole in hard formations as a fish-tail bit. Capacity to core the stickiest gumbo or other formation without balling up Capacity to make full size hole, without leaving shoulders when run in various sizes of casing. Lowest running costs, per foot of hole, of any core drill owing to tool steel blades and heavy stellite.

To fully appreciate the significance of this new tool steel Core Drill, you should read all the facts about it in the new booklet now on the press. Many illustrations, and prices, are included. The coupon below, or a post card or letter, will bring it with our compliments, and no obligation.

Send it in while you're thinking about it!

W-K-M Company, Inc.
HOUSTON, TEXAS
Send for Free Descriptive Price List

W-K-M COMPANY, INC.,
HOUSTON, TEXAS

Gentlemen:

Please forward descriptive pamphlet to the address below:

Name . . . . . .

Street . . . . . .

City . . . . . .

State . . . . . .

Say you saw it in The OIL WEEKLY

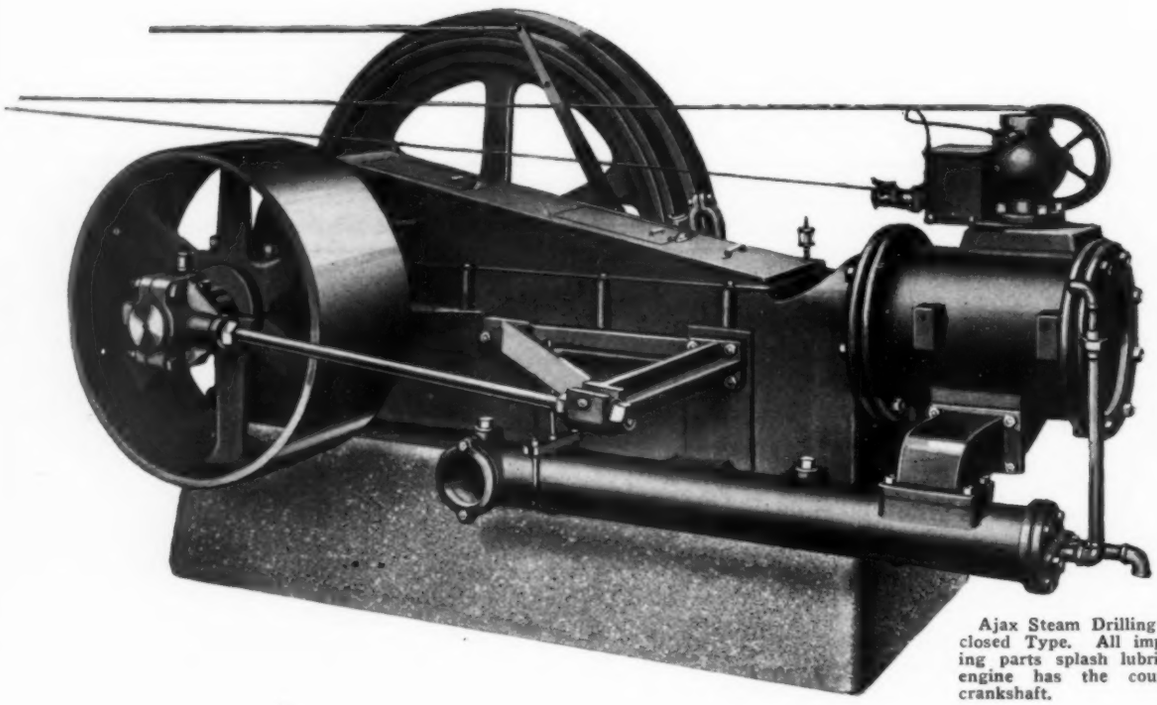
Field Statistics Covering 1926

The following pages graphically tell the story of the producing branch of the Oil Industry for the past year. Here will be found figures and statistics answering every question on the economic condition of the producing branch of the business. The tabulations and charts should prove of tremendous value at this time to executives and field men in outlining operating schedules for the coming months. As a permanent reference work this information cannot be equaled.

Index to Statistics

SUMMARY OF CRUDE PETROLEUM FROM 1921 TO 1926..... 92
GASOLENE TREND FOR PAST FIVE YEARS..... 96
YEARLY PRODUCTION OF ALL UNITED STATES FIELDS.....102
U. S. PRODUCTION AND FIELD STATISTICS, 1922 TO 1926..... 99
RELATIVE VOLUME OF PETROLEUM, 1900 TO 1926.....108
RELATIVE INCREASE IN PRODUCTION-CONSUMPTION-IMPORTS.....108
CRUDE OIL PRICES, 1922 TO 1926.....112
REFINED PRODUCTION FROM 1921 TO 1926.....116
U. S. STOCKS OF CRUDE AND REFINED OILS.....120
WORLD PRODUCTION OF CRUDE BY TABULATION.....123
UNITED STATES PRODUCTION BY FIELDS, 1859 TO 1926.....124
UNITED STATES PRODUCTION BY STATES, 1926.....126
UNITED STATES PRODUCTION BY GRAVITIES.....126
CALIFORNIA PRODUCTION BY FIELDS, 1876 TO 1926.....128
TEXAS PRODUCTION BY FIELDS, 1895 TO 1926.....132
UNITED STATES FIELD STATISTICS FOR 1926.....140
UNITED STATES PRODUCTION BY FIELDS BY YEARS.....136

AJAX Will



Ajax Steam Drilling Engine, Enclosed Type. All important moving parts splash lubricated. This engine has the counter-balanced crankshaft.

Recount to yourself the advances in oil drilling engine **design. They are original Ajax improvements.**

The Ajax factory is now shipping both single and twin cylinder engines with enclosed crankcase, giving main bearings, cross-heads and all important wearing parts the advantage of splash lubrication.

AJAX ENGINES

AJAX-
DRILLING

Say you saw it in The OIL WEEKLY

Always Mean the Best

Apart from design consider the progress in drilling engine **construction.** The Ajax factory introduced precision workmanship to oil field power equipment. The standard of hardened and ground parts checked to close limits by master gauges is an original Ajax standard.

Made by

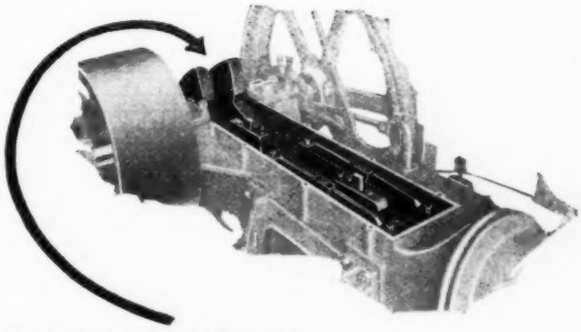
Ajax Iron Works

Corry, Pa.

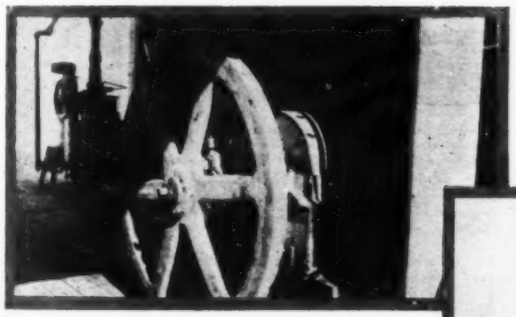
Distributed by

National Supply Companies

In every oil field



Counter-balanced crankshaft used in Ajax Drilling Engines. An original Ajax improvement which reduces vibration and steadies the engine on its foundation.



Ajax 13x14 Enclosed Type Drilling Engine used at the river bed well.

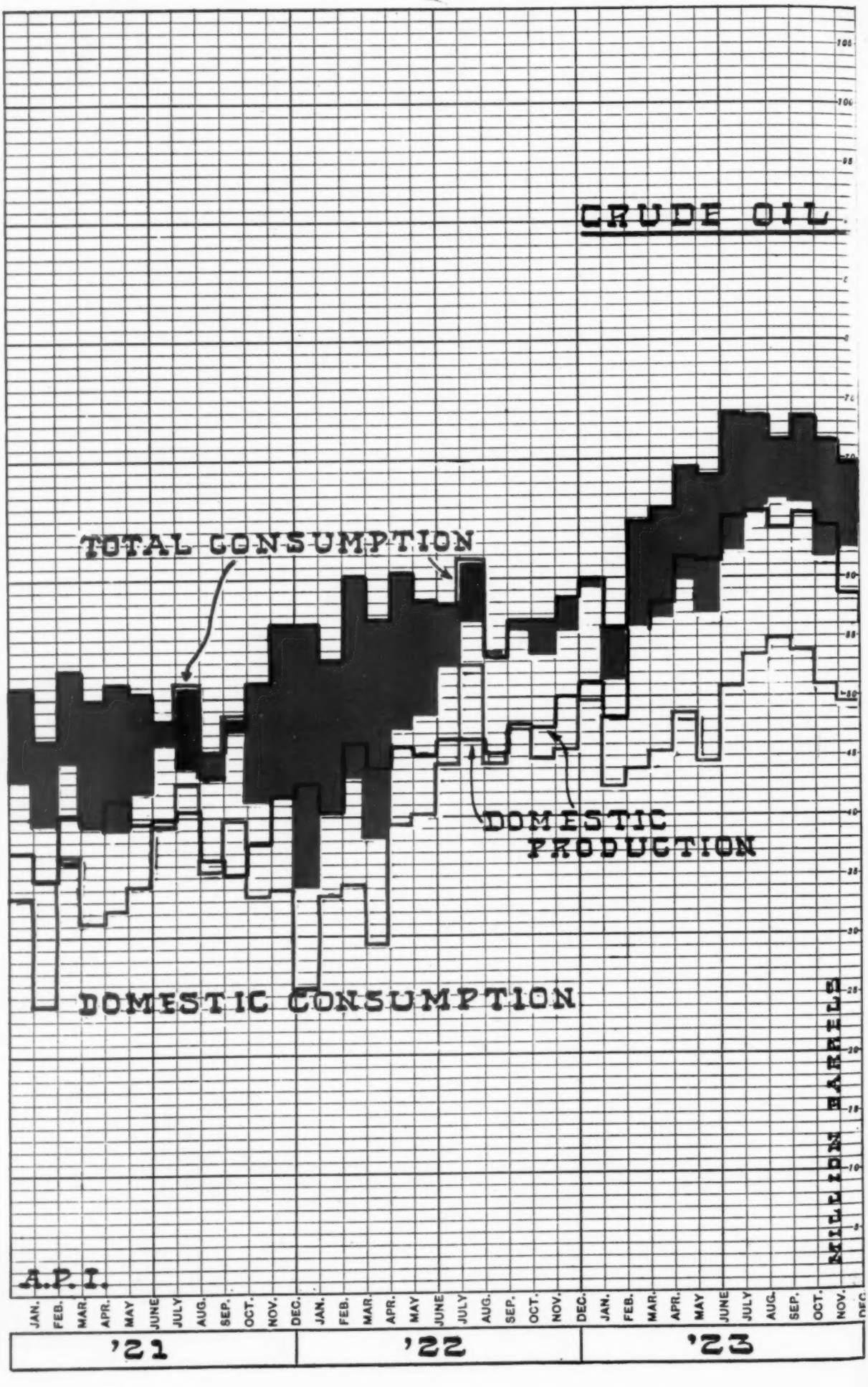
AJAX Snap Shots

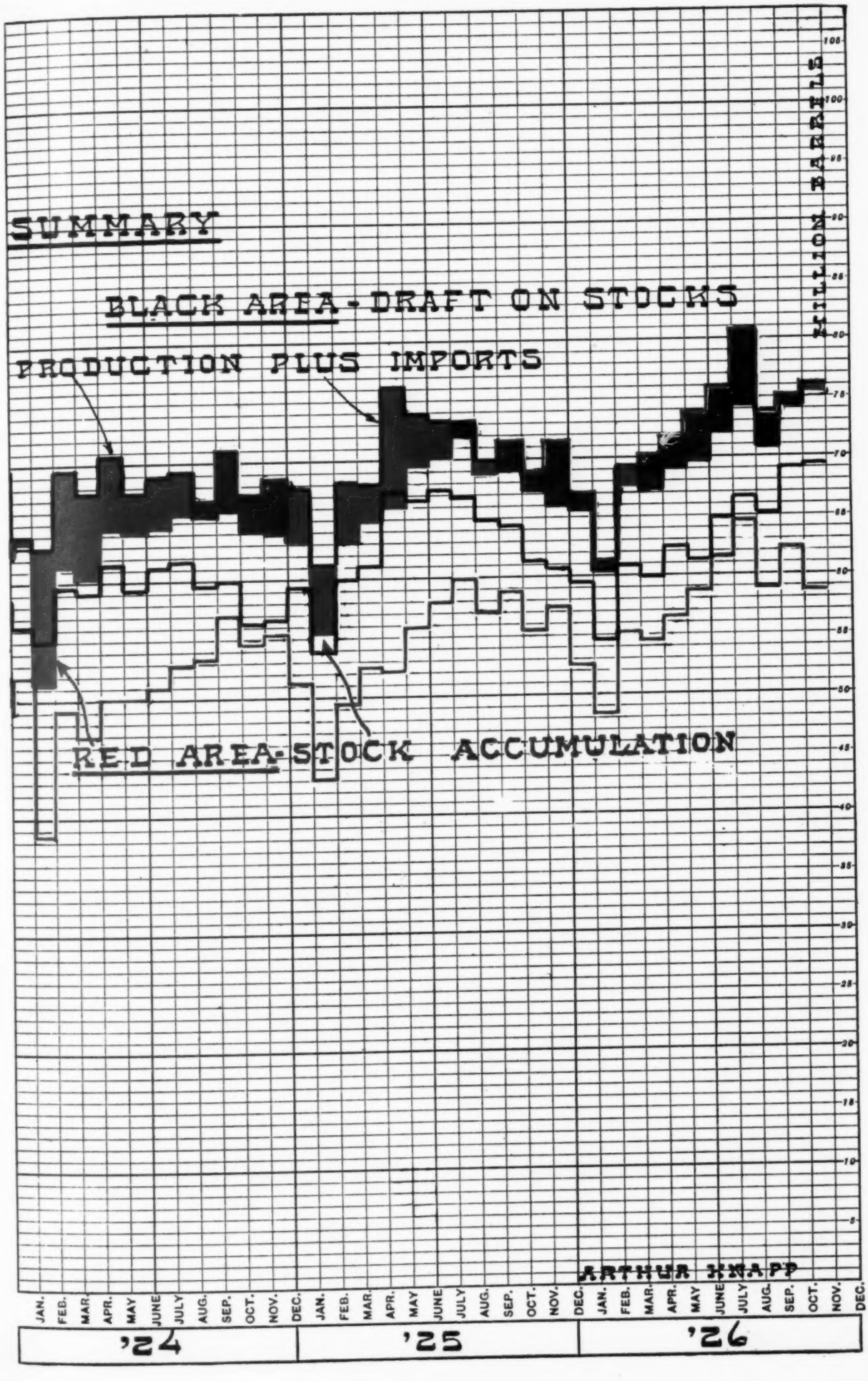
Marland Oil Co. well in Canadian River Bed, Texas Panhandle. Foundation for rig and trestle built over bed of quicksand.

STEAM ENGINES

34187

Say you saw it in The OIL WEEKLY


CRUDE OIL
TOTAL CONSUMPTION
DOMESTIC PRODUCTION
DOMESTIC CONSUMPTION
A.P.I.
MILLION BARRELS
JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEP. OCT. NOV. DEC.
'21
'22
'23


SUMMARY
BLACK AREA - DRAFT ON STOCKS
PRODUCTION PLUS IMPORTS
RED AREA - STOCK ACCUMULATION
MILLION BARRELS
ARTHUR M. KNAPP
JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEP. OCT. NOV. DEC.
'24
'25
'26

PERFORMANCE—

SHAFFER
PATENTED OILWELL EQUIPMENT
TULSA

All original SHAFFER Products bear this Trade Mark

SHAFFER PRODUCTS—Through their performance, plus an untiring organization of practical engineers in this line have made for them their present dominant position in the oil country specialties field.

Be sure you have our latest descriptive catalogue. If not, write us.

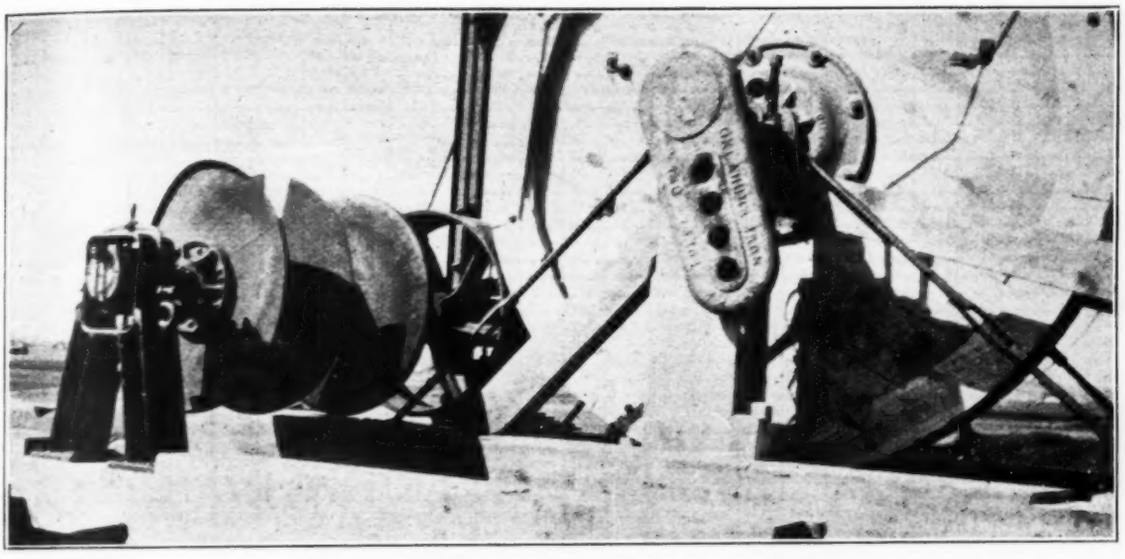
The Shaffer Specialty Co.

Tulsa, Oklahoma

113-15 So. Denver Ave. Telephone 7271

Say you saw it in The OIL WEEKLY

-PLUS-



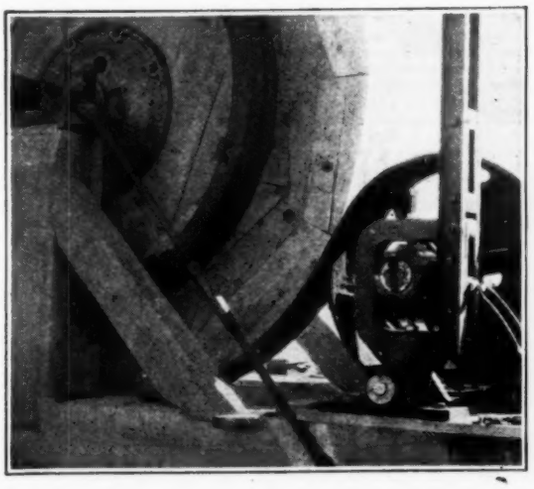
Tail post of walk side reel mounted on support

Shaffer-Almetal Sand Reel Supports—

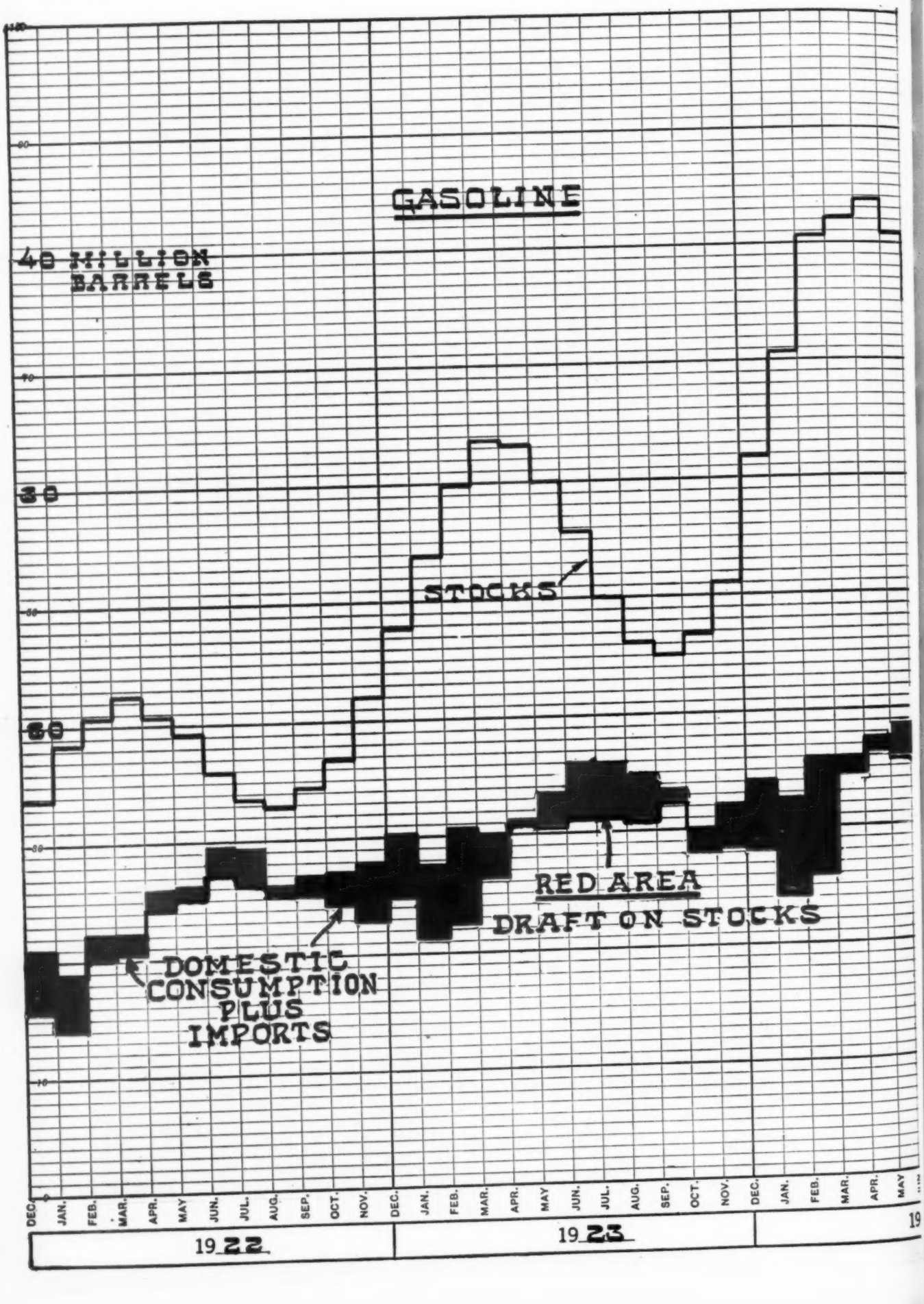
are being used as Standard Equipment by hundreds of the largest producers, in fields all over the world.

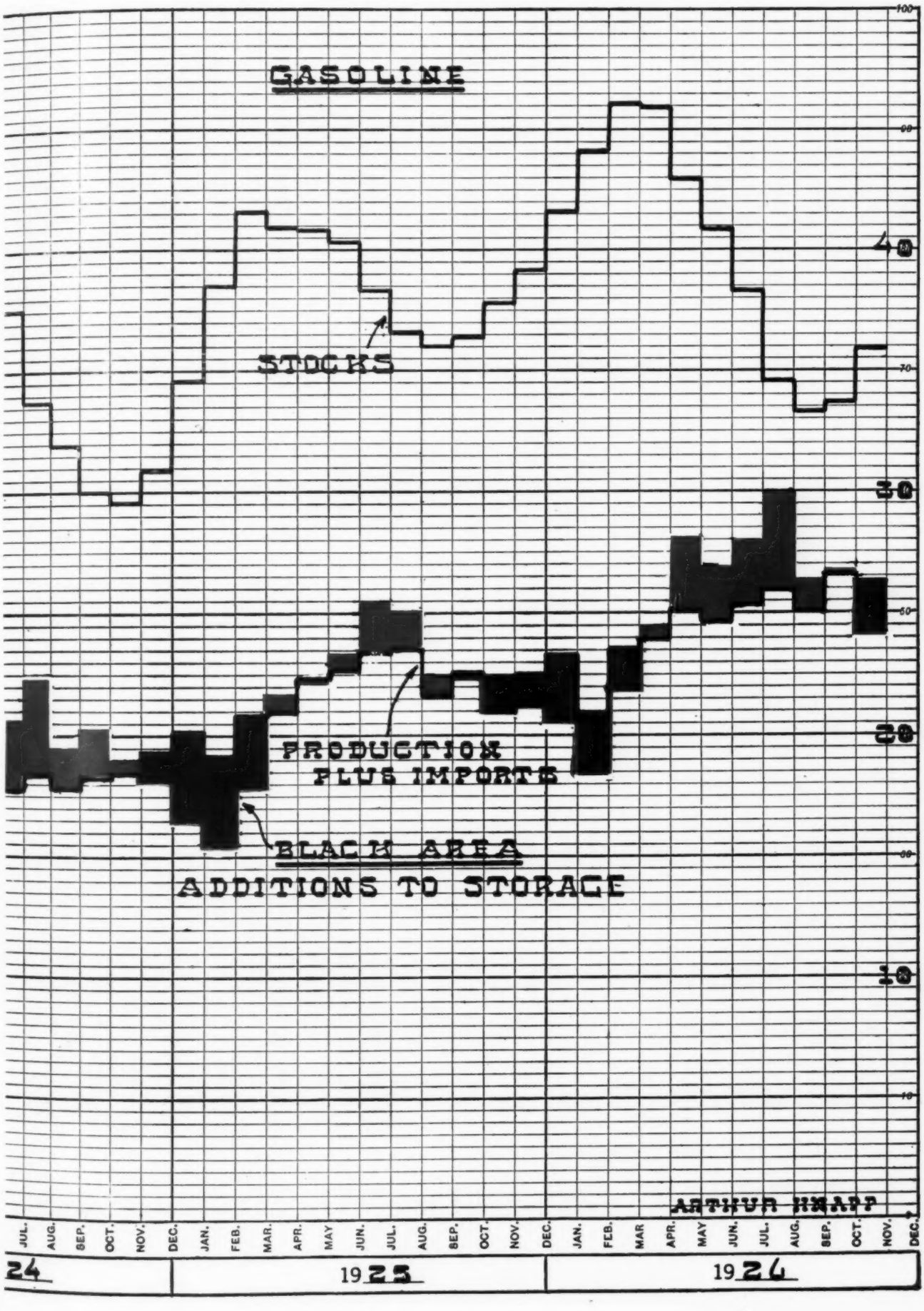
With the low initial cost and long service possible this outfit has no equal.

Shaffer's Almetal was the first and original, serviceable, sand reel support, and today is without a peer as to performance.

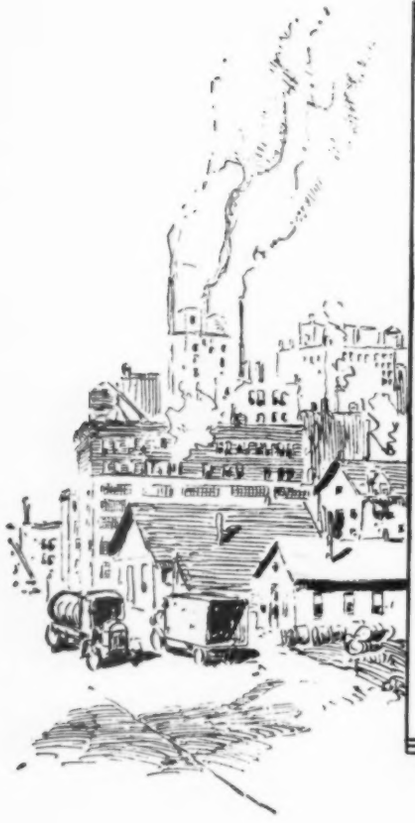


Knuckle post view of walk side reel mounted on support


GASOLINE
40 MILLION BARRELS
30
20
10
STOCKS
RED AREA
DRAFT ON STOCKS
DOMESTIC CONSUMPTION PLUS IMPORTS
DEC.
JAN.
FEB.
MAR.
APR.
MAY
JUN.
JUL.
AUG.
SEP.
OCT.
NOV.
DEC.
JAN.
FEB.
MAR.
APR.
MAY
1922
1923

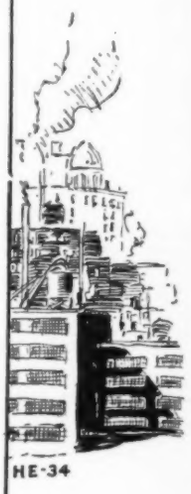

GASOLINE
STOCKS
PRODUCTION PLUS IMPORTS
BLACK AREA
ADDITIONS TO STORAGE
ARTHUR HNAPP
100
90
40
70
30
50
20
30
10
10
JUL. AUG. SEP. OCT. NOV. DEC. JAN. FEB. MAR. APR. MAY JUN. JUL. AUG. SEP. OCT. NOV. DEC. JAN. FEB. MAR APR. MAY JUN. JUL. AUG. SEP. OCT. NOV. DEC.
24
1925
1926

HOPE VERTICAL COMPRESSORS

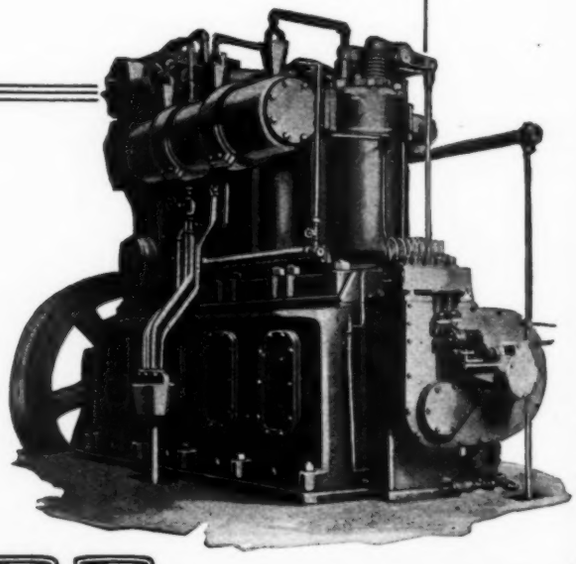


The purchaser of a gas compressor pays for a machine, but what he buys is an ability to compress gas. The measure of the economy of his purchase is the total cost per million cubic feet of gas compressed. The Hope Vertical is revealing costs which distinguish it as the most economical gas compressor made. And its economy is not a diminishing quality.

Ask us for specifications.



HE-34



ENGINEERS CONTRACTORS

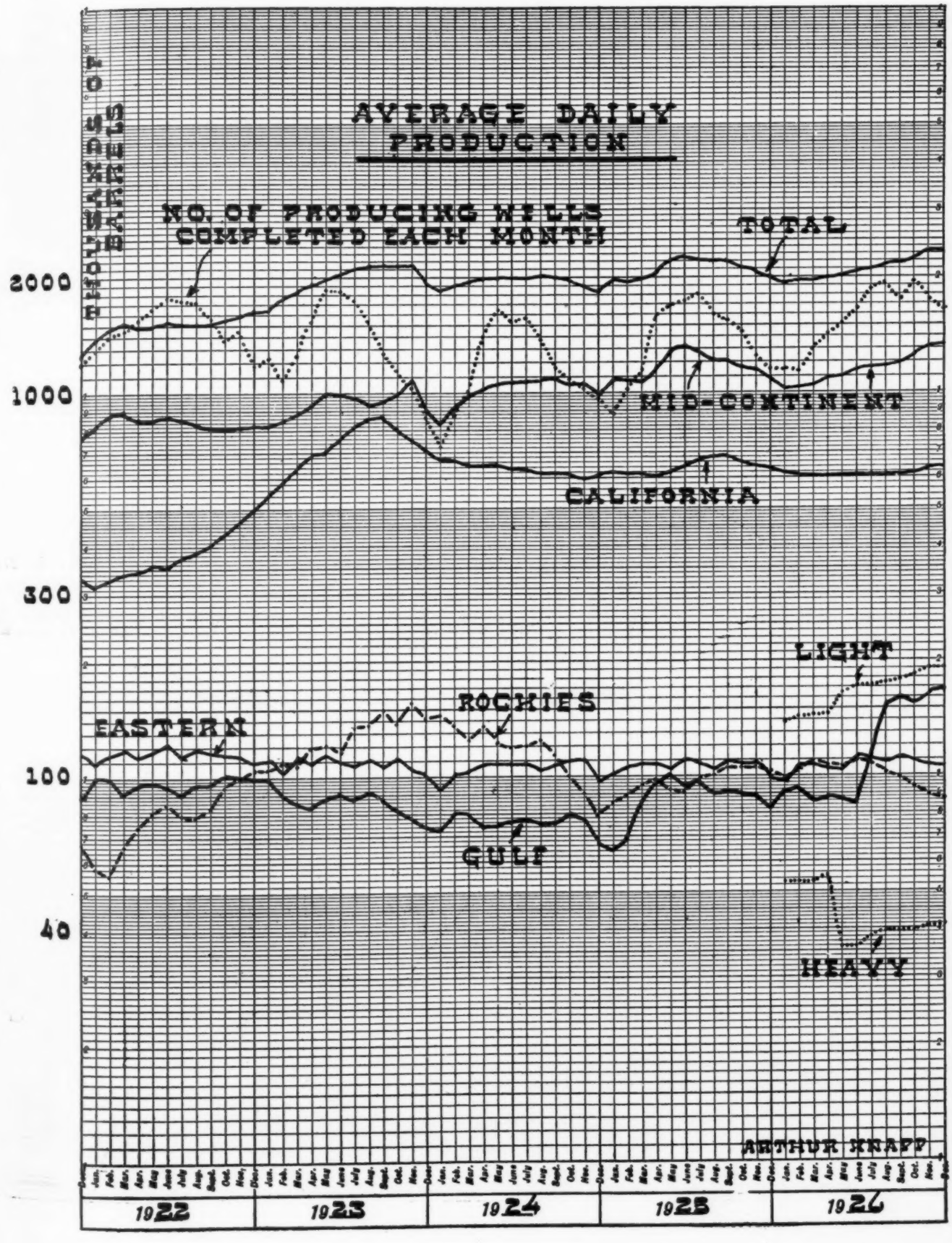
HOPE ENGINEERING AND SUPPLY COMPANY

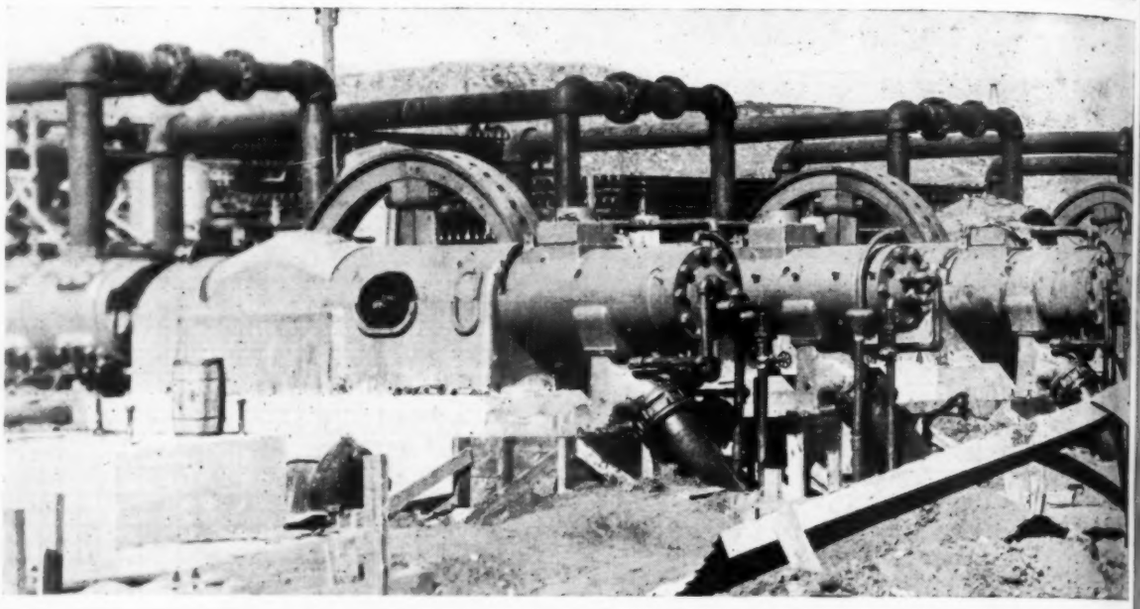
DESIGNERS MANUFACTURERS

MOUNT VERNON, OHIO, U.S.A.

DALLAS, TEX. TULSA, OKLA. CASPER, WYO.

U. S. PRODUCTION AND FIELD STATISTICS, 1922 to 1926





Clark Bros. Co. OLEAN, N.Y.

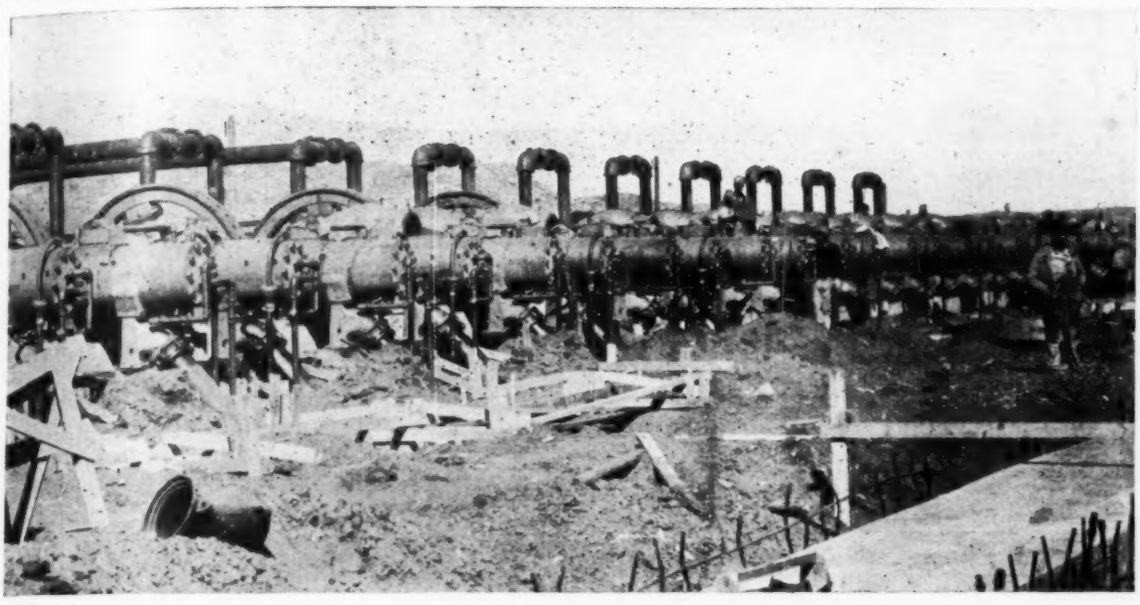
Not a boom, but the healthy growth of a pro
activity in casinghead gasoline manufacture,

CLARK COM

The Photos show one of the World's largest

125 East First Street,
Tulsa, Oklahoma
Warehouses at Sweetwater and McCamey, Texas

CLARK BROS



gressive Industry, accounts for the increased and the resulting increase in demand for

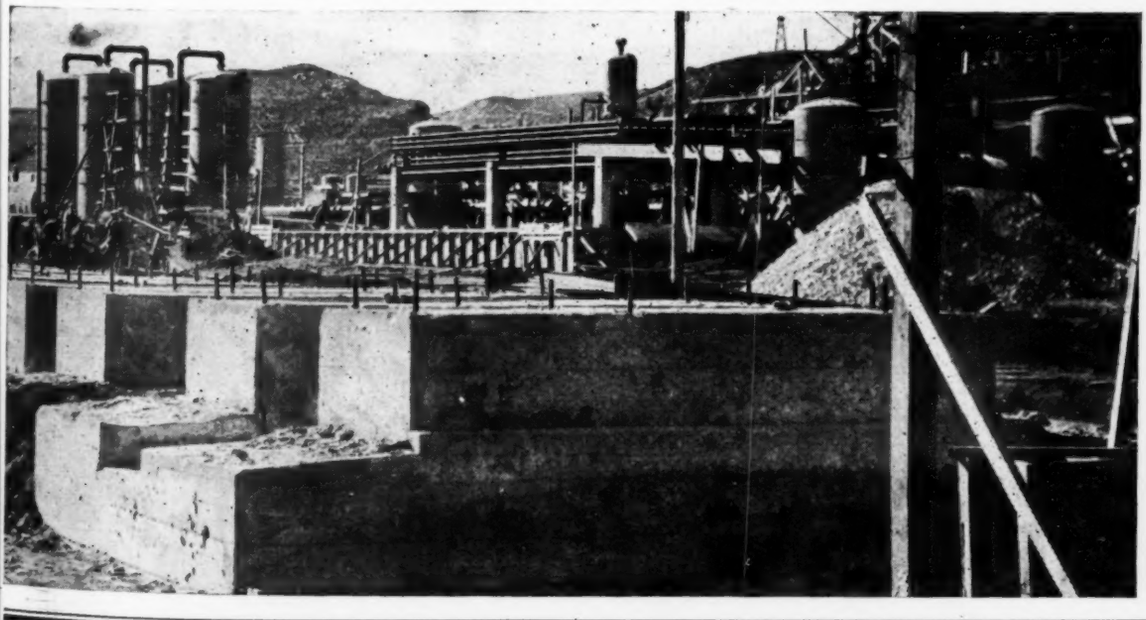
PRESSORS

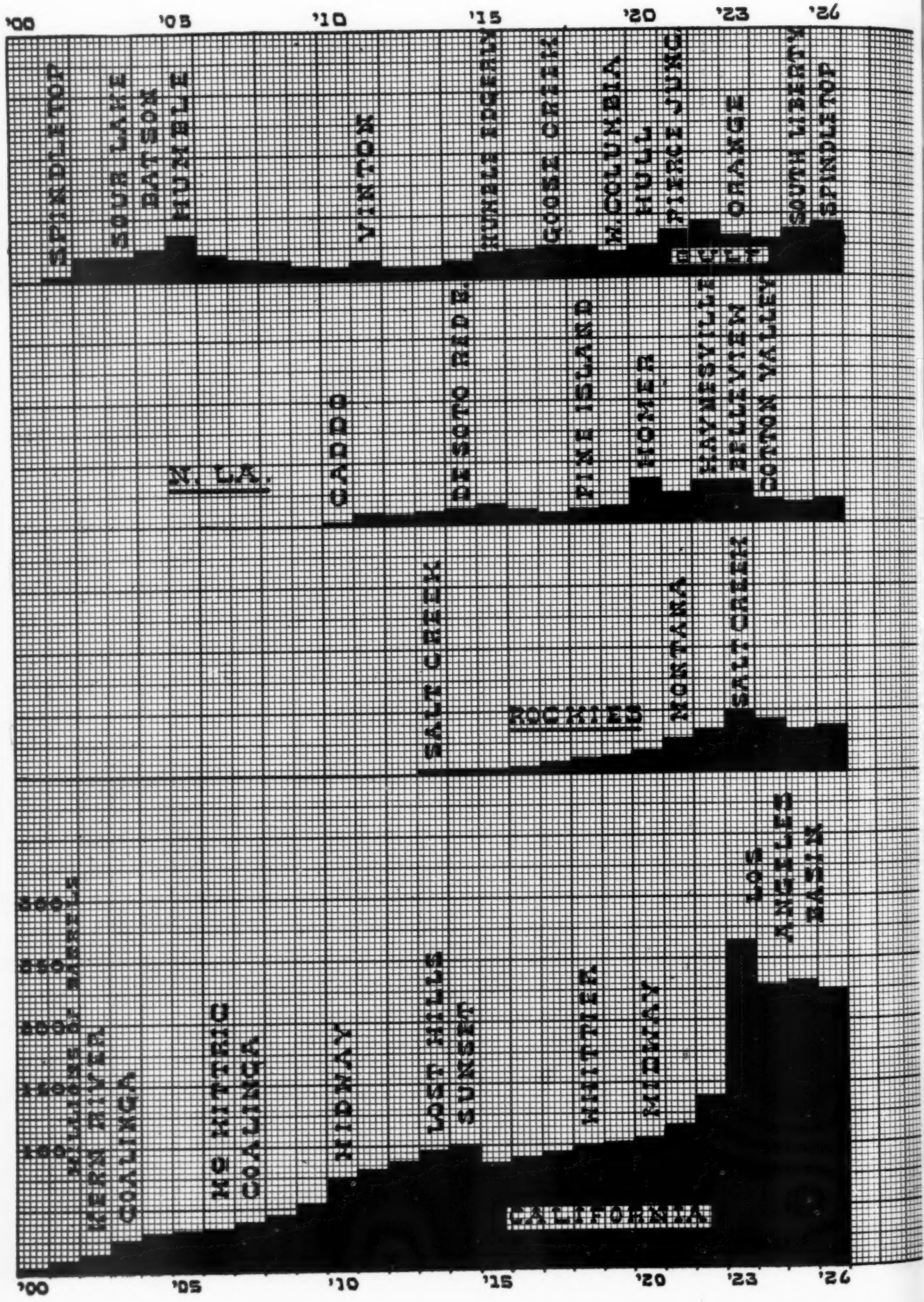
casinghead Gasoline Plants under construction

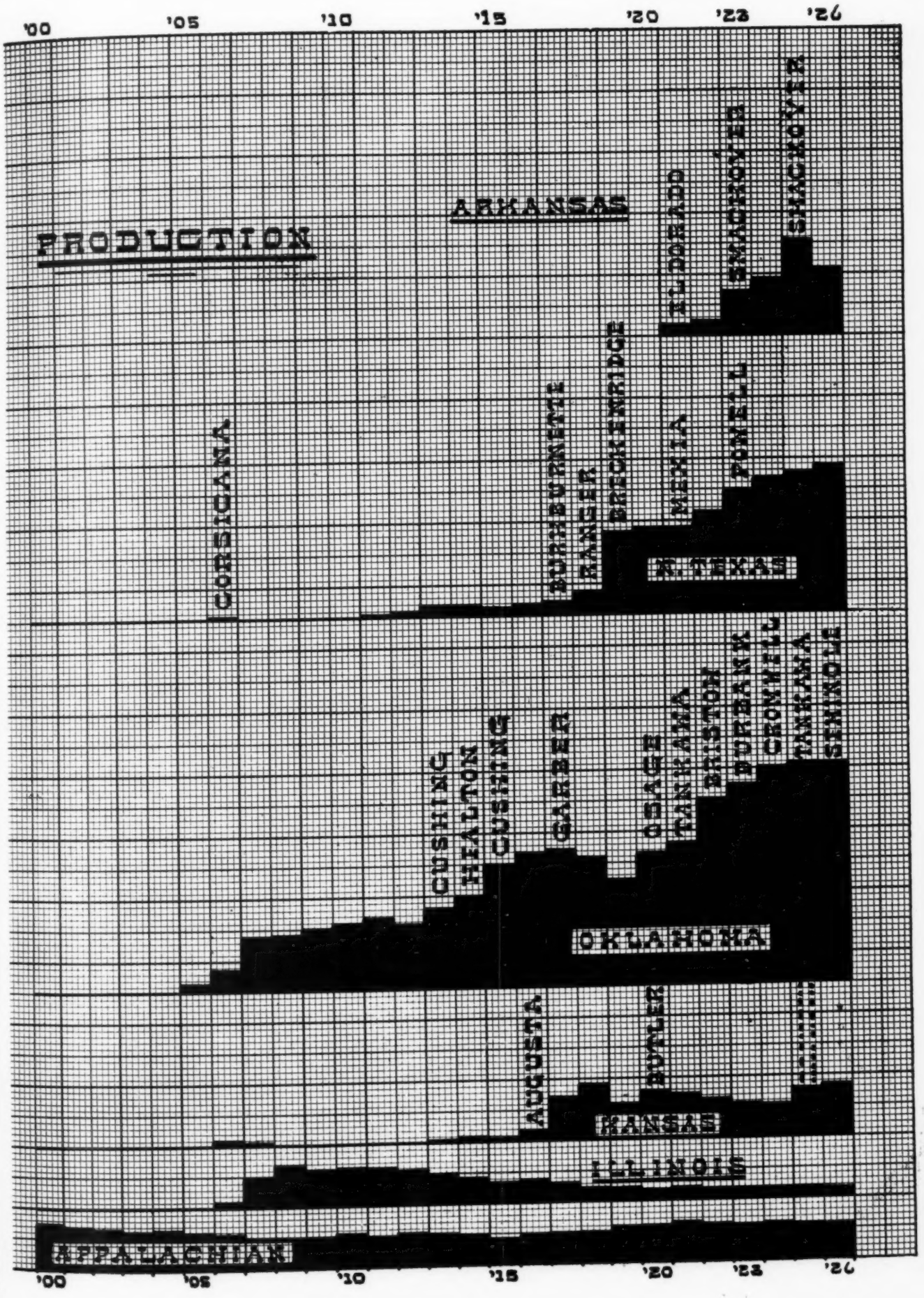
COMPANY **OLEAN, NEW YORK**

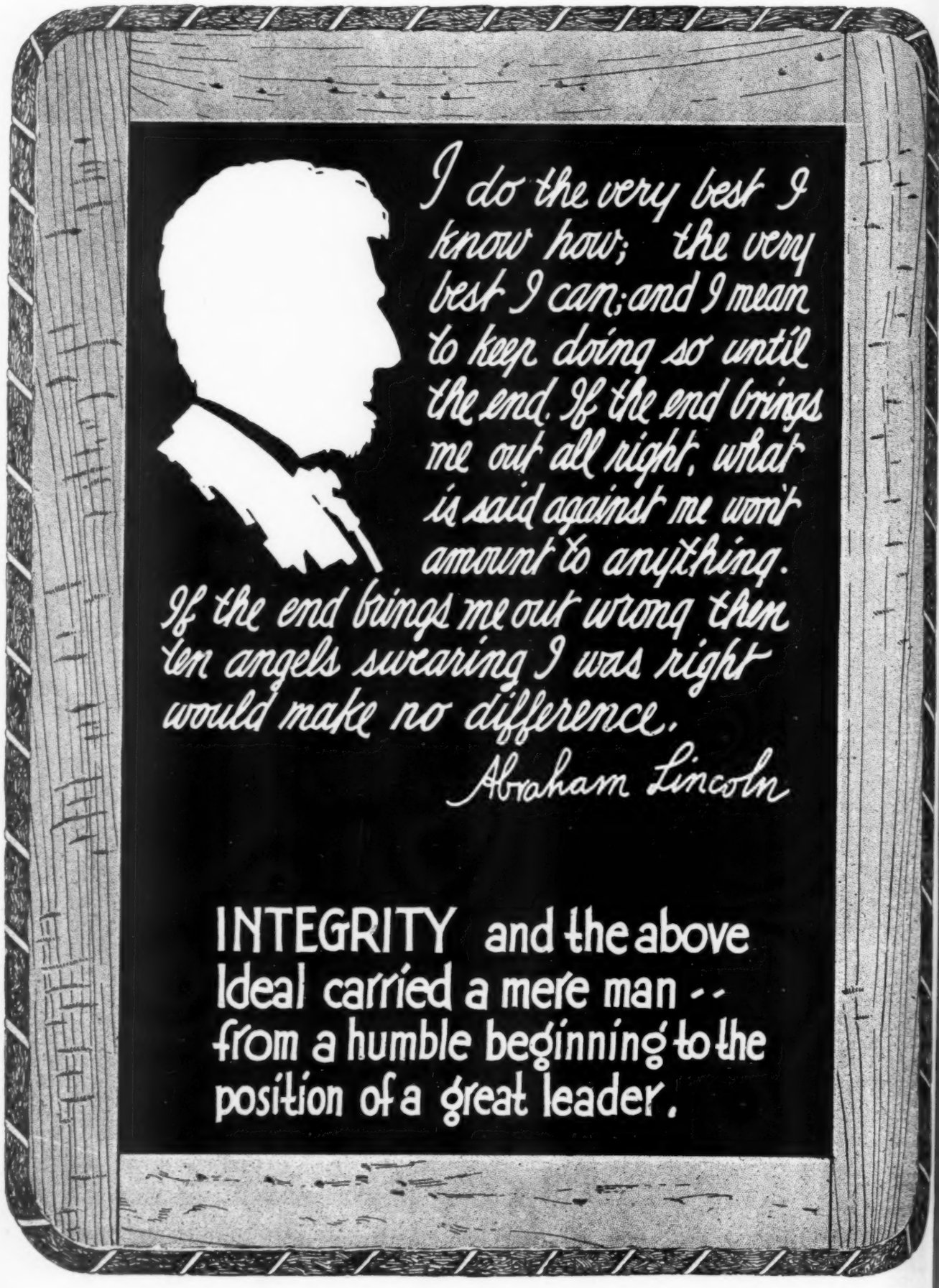
Compressors and Gas Engines

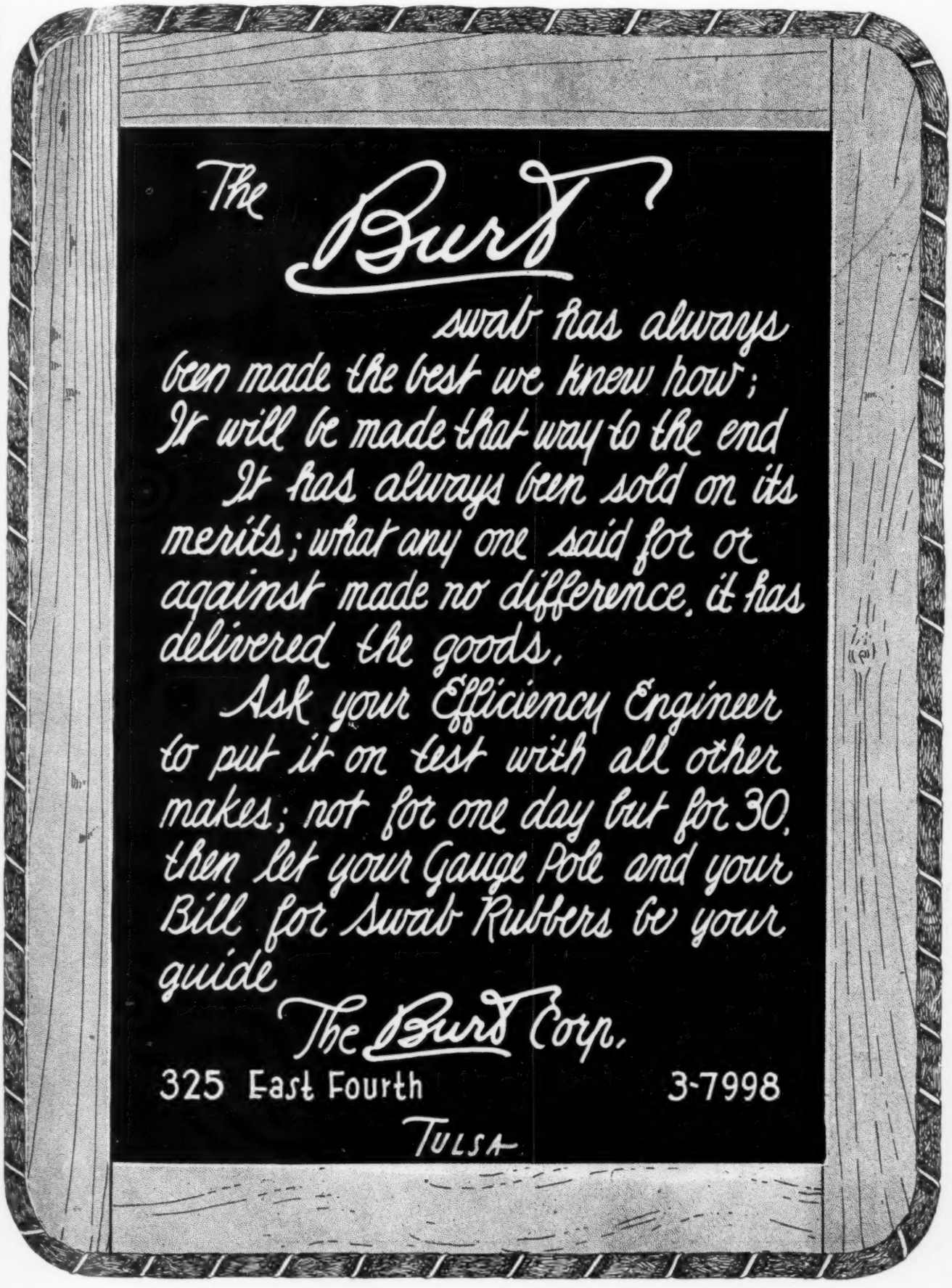
Smith-Booth-Usher Co.,
225 E. Central Ave., Los Angeles
50 Fremont St., San Francisco




'00
'05
'10
'15
'20
'23
'26
SPINDLETOP
MOUR JAKE
BATSON
HUMBLE
YOUNGS
KUMLA ROBERTS
GOOSE CREEK
N. COLUMBIA
HUJI
RICECOUNTY
ORANGE
SOUTH LIBERTY
SPINDLETOP
N. LA.
CADDO
OSAGE
PINE ISLAND
ELDORADO
RAYNESVILLE
BELLEVIEW
DONNA VALLEY
SALT CREEK
ROCKIES
MONTANA
SALT CREEK
LOS ANGELES BASIN
MIDWAY
MIDDLE WESTERN
WYOMING
NEW MEXICO
OKLAHOMA
NORTH TEXAS
KANSAS
CALIFORNIA
3000
2500
2000
1500
1000
500


PRODUCTION
'00
'05
'10
'15
'20
'23
'26
ARKANSAS
LOUISIANA
SOUTHWESTERN
RANGER
BRECKENRIDGE
NEW YA
PANHANDLE
EL DORADO
SMACKOVER
SMACKOVER
N. TEXAS
CUSHING
HEALDTON
CUSHING
GARBER
EARLSBORO
PANHANDLE
BURBANK
CROMWELL
PANHANA
SEMINOLE
OKLAHOMA
AUGUSTA
BUTLER
KANSAS
ILLINOIS
APPALACHIAN


I do the very best I know how; the very best I can; and I mean to keep doing so until the end. If the end brings me out all right, what is said against me won't amount to anything. If the end brings me out wrong then ten angels swearing I was right would make no difference.
Abraham Lincoln
INTEGRITY and the above Ideal carried a mere man -- from a humble beginning to the position of a great leader.


The Burt
swab has always been made the best we knew how; It will be made that way to the end
It has always been sold on its merits; what any one said for or against made no difference, it has delivered the goods.
Ask your Efficiency Engineer to put it on test with all other makes; not for one day but for 30, then let your Gauge Pole and your Bill for Swab Rubbers be your guide
The Burt Corp.
325 East Fourth 3-7998
TULSA

Texon Oil & Land Company

Group No. 1 Oil Corporation — Group No. 2 Oil Corporation

Texon Oil & Land Company of Texas

New Oil Properties
Producing but Undeveloped
Solicited

"Watch Us Grow"

Communicate With Us Upon Completion
of New Production
If Assistance Is Needed or Sale Desired.

Producers of High Grade Crude Oil
Discoverers of the Big Lake, Reagan County, Field

General Offices
at
Santa Rita, Texas

Mail Address: Big Lake, Texas — Wire Address: Santa Rita, Texas

BIG LAKE OIL COMPANY

Producers

of

Reagan County High Grade

Crude Oil

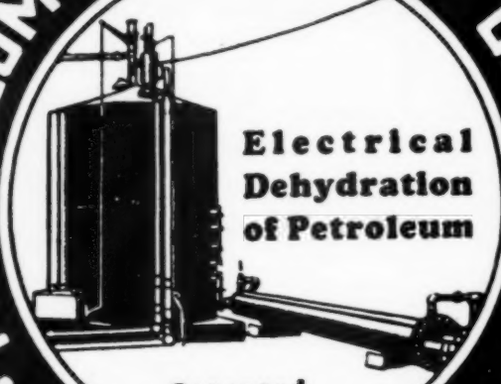
and

Natural Gasoline

Executive Offices
Pittsburgh, Penna.

Field Offices
Texon, Texas

PETROLEUM RECTIFYING COMPANY · OF CALIFORNIA ·

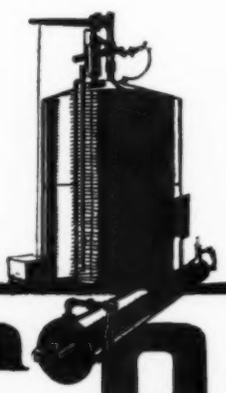


THE shortest, simplest and easiest way to increased profits and extra dividends when your production is "cut."

PETROLEUM RECTIFYING COMPANY of CALIFORNIA

308 Union Oil Bldg. Los Angeles, Calif.

336 Humble Bldg. Houston, Texas

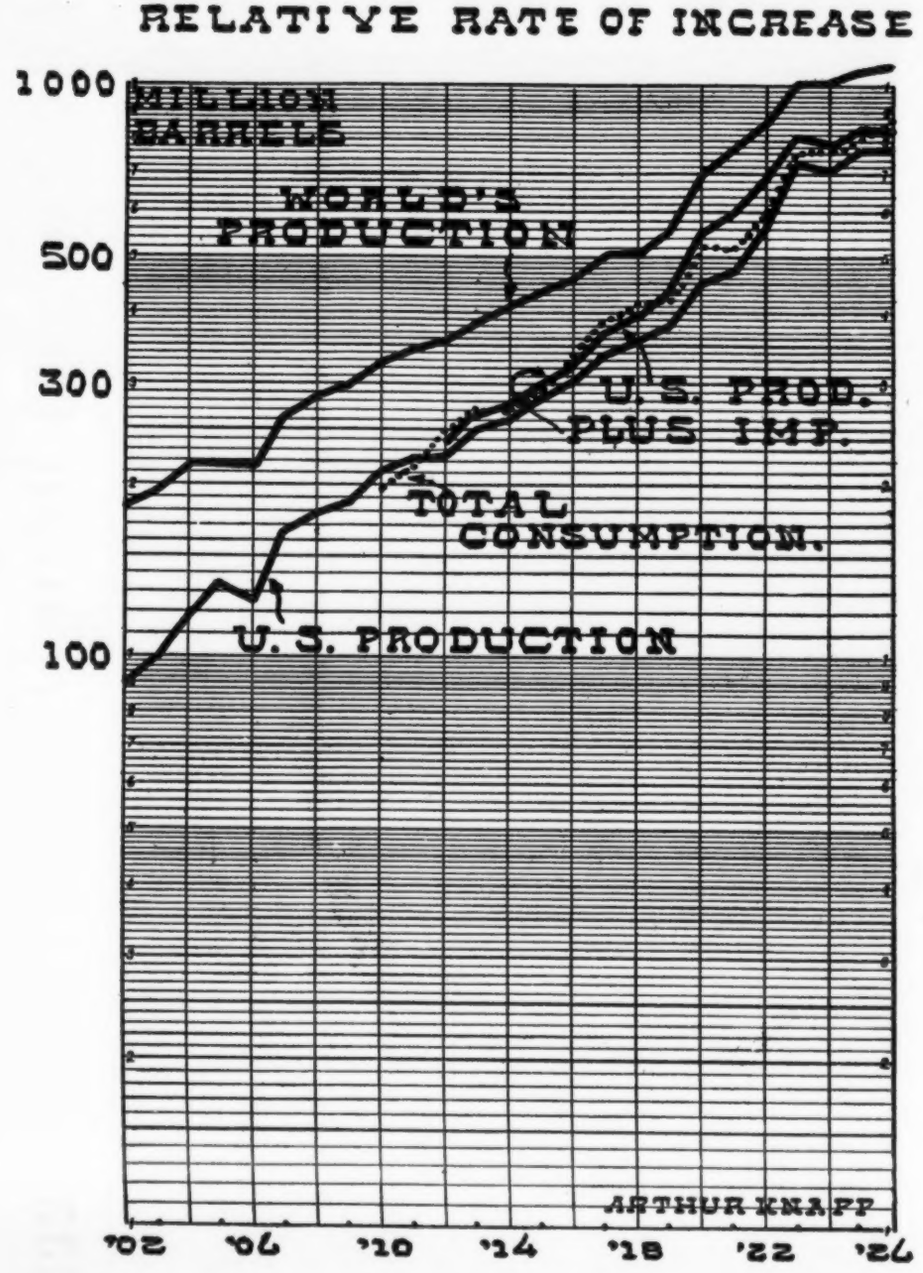


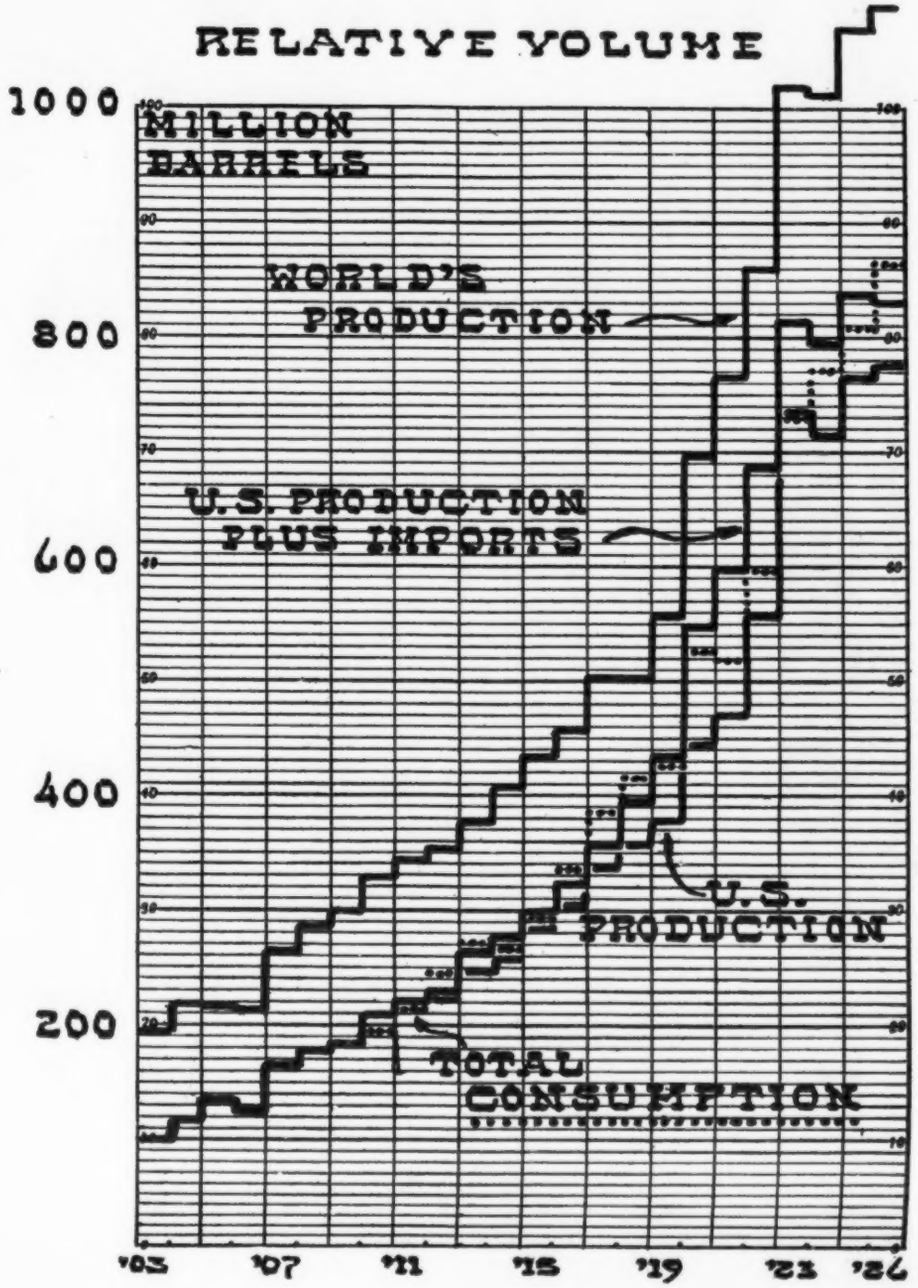
PETREC

Say you saw it in The OIL WEEKLY

A Gulf Publishing Company Publication

FEBRUARY 18, 1927

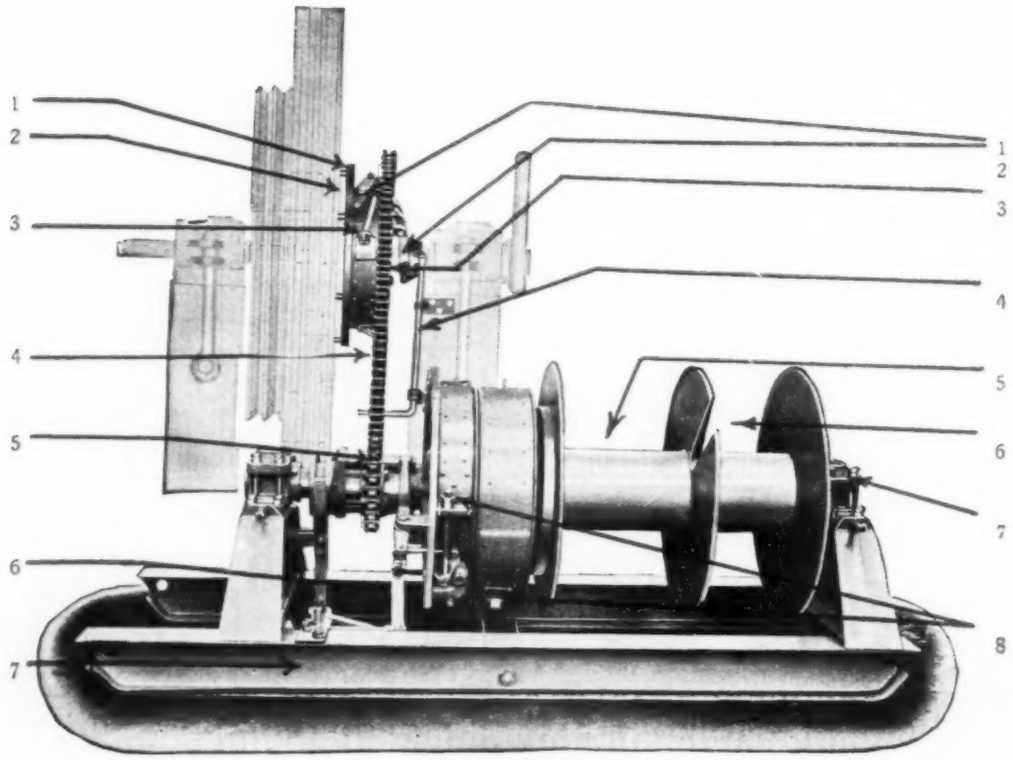




The S. & B. Chain Driven Sand Reel

MODEL 27

Fits Any Rig Without Alteration



1. Two Piece Driving Flange fits over Regular Rig Iron Flange.
2. Single Adjusting Bolt to Compensate for Wear.
3. Diamond Roller Chain for silence, speed and strength.
4. Machine Cut Steel Sprocket.
5. Single Control Lever for operating Clutch and Brake.
6. Steel Frame, Universally Applicable, Portable, Oak Sills optional.

1. Two Piece Bandwheel Friction, Clutch requires 10½" of shaft space, entirely removable.
2. Flange Keys may be driven without removing parts.
3. All breakable Brackets and Levers of Steel.
4. Capacity 7000 feet of 9/16" line.
5. Capacity 3500 feet of 9/16" Line.
6. Heavy Adjustable Bearings.
7. Single Adjusting Bolt for Clutch and Brake.

Domestic Distribution
All Supply Company Stores
Everywhere

THE OIL COUNTRY SPECIALTIES MFG. CO.
COFFEYVILLE, KANSAS

Export Distribution
The Oil Well Supply Company
Pittsburgh, Pennsylvania, U. S. A.

Say you saw it in The OIL WEEKLY

The First Successful Chain Driven Sand Reel

The S. & B. Chain Driven Sand Reel was the first successful chain driven sand reel, the pioneer having been installed in June, 1921, in the Fox-Bush field near Augusta, Kansas. This old, pioneer S. & B. Reel has bailed over 75,000 feet of hole up to the end of 1926 and is now working on a wildcat well near its original location.

Can Be Moved From One Location to Another

Excepting those destroyed by fire or accident, every one of over 600 S. & B. Chain Driven Sand Reels built in five and one-half years is, or can be made serviceable. The fact that it can be moved from one location to another, plus the savings of time, fuel, steam, labor and all equipment, make the S. & B. Chain Driven Sand Reel the definite answer to Economical Bailing.

Fits Over Any Standard Rig

The entire Bandwheel Assembly fits over any standard rig iron flange—special flanges are unnecessary. The Bandwheel Clutch and the Sand Reel Clutch are **both** of the **friction band type,** providing a flexible application of power, with **two** safe-guards against snapping the line should the bailer "hang up." Provision has been made for adequate cooling of Clutches and Back Brake, which are external contracting bands and each is adjusted by a single Adjusting Bolt.

Time, Power and Fuel Saving

Frictional losses are so low that steam pressure is frequently **built up while bailing.** Bailer speeds of as much as 1500 feet per minute have been observed from depths as great as 7300 feet. Time, power and fuel savings are definite and notable. Saving the bandwheel face saves belts. The smooth, vibrationless motion saves jack-posts and the entire equipment. The Control Lever can be handled with one hand and without **riding** the lever.

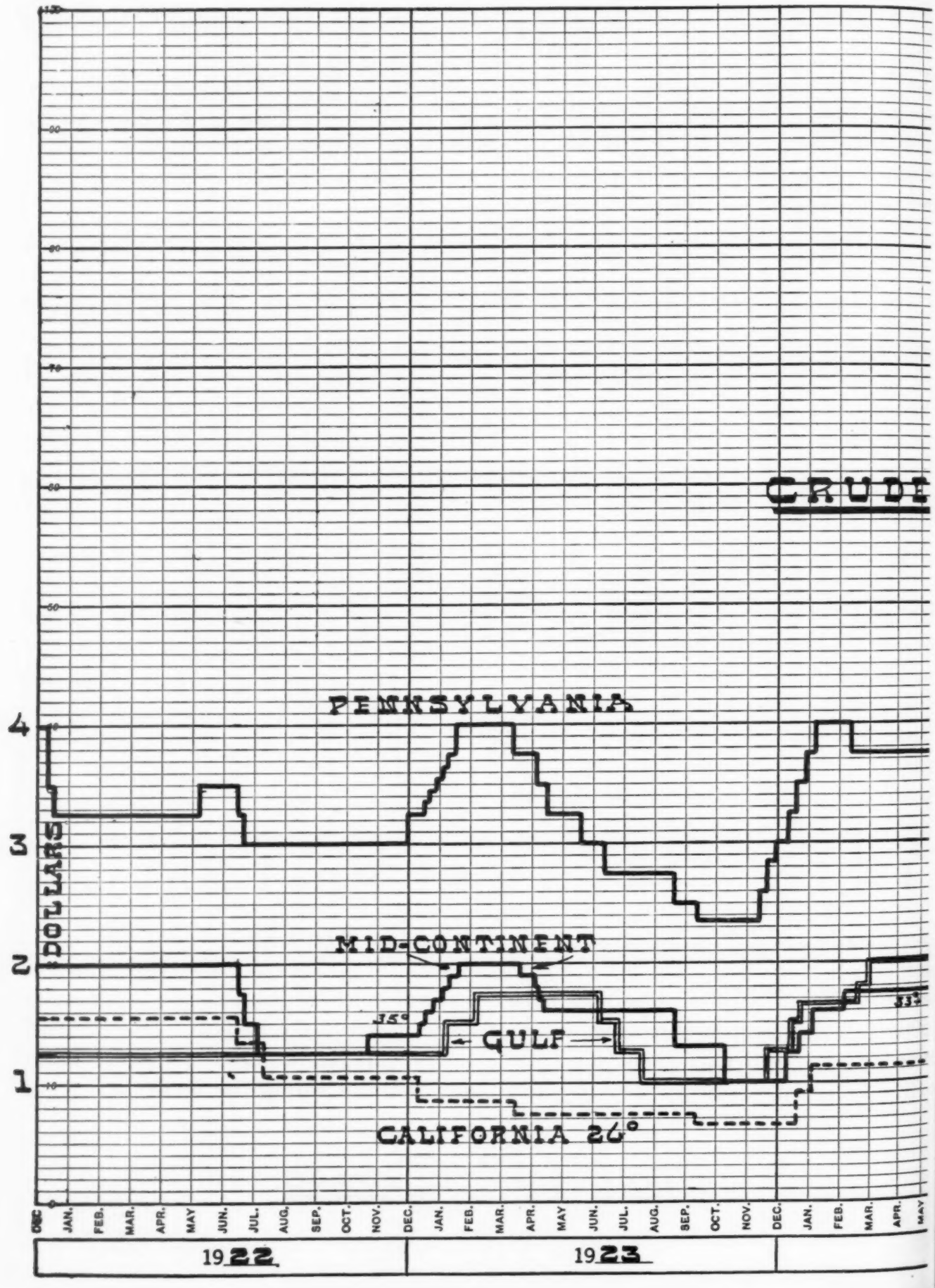
Domestic Distribution
All Supply Company Stores
Everywhere

THE OIL COUNTRY SPECIALTIES MFG. CO.
COFFEYVILLE, KANSAS

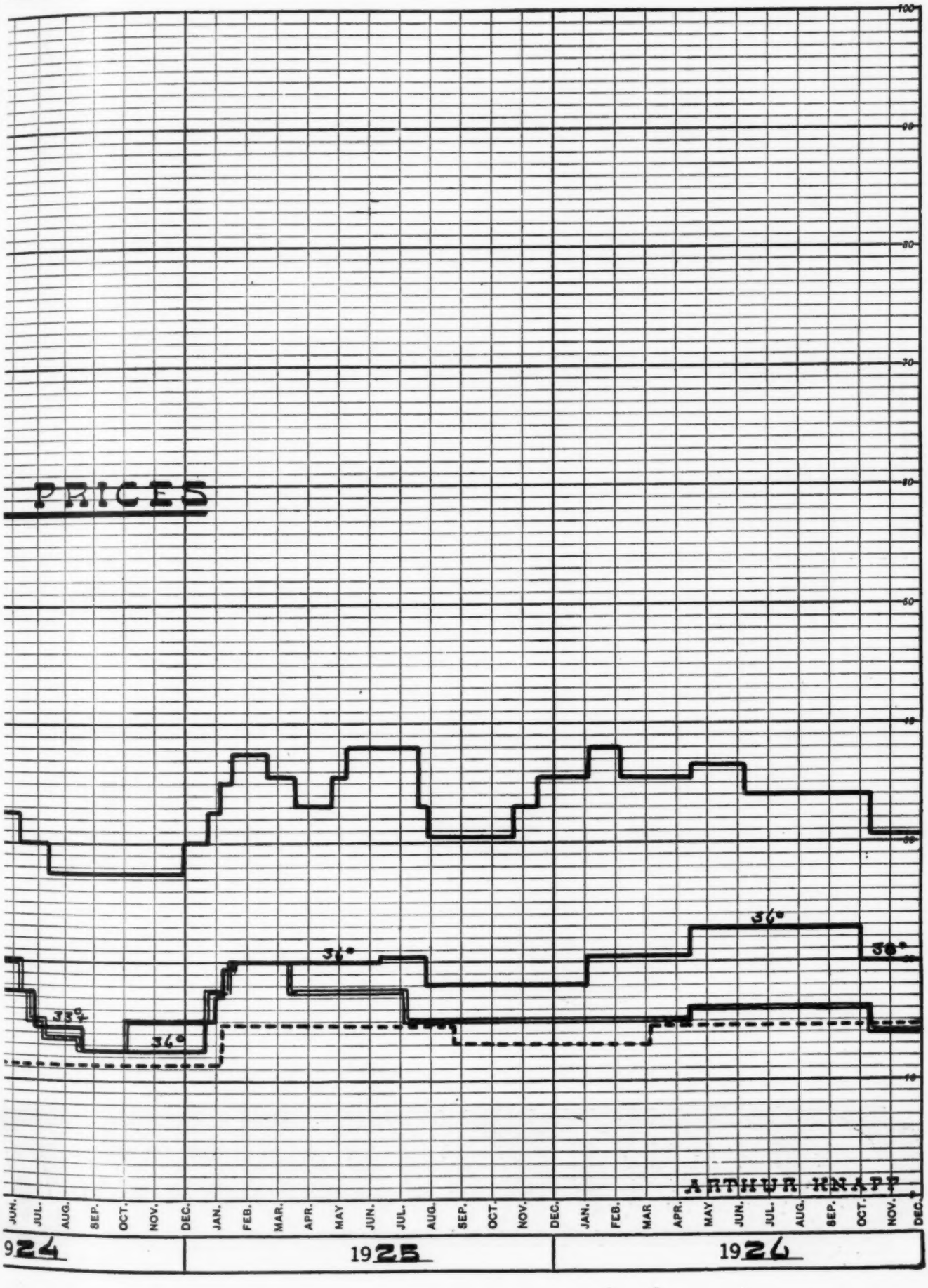
The Oil Well Supply Company
Pittsburgh, Pennsylvania, U. S. A

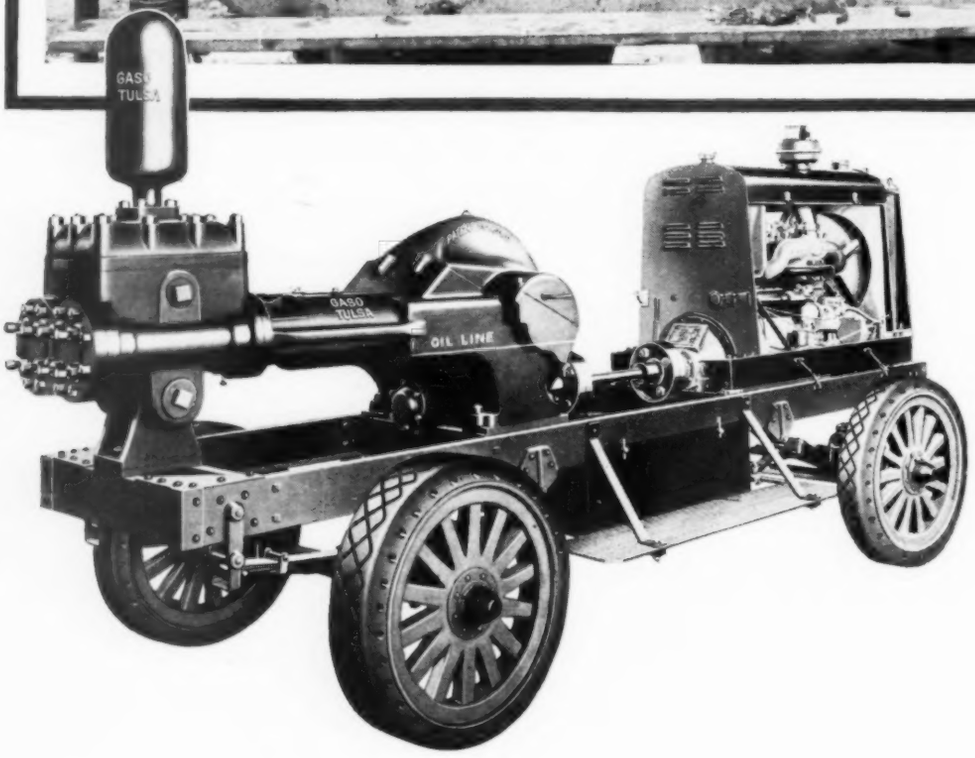
Say you saw it in The OIL WEEKLY

COMPARISON OF CRUDE PRICE STRUCTURE 1922-1926



COMPARISON OF CRUDE PRICE STRUCTURE 1922-1926





7 GASO PORTABLE PUMPING PLANTS

mounted on skids, supplying water for extensive operations in the Seminole Field, Oklahoma. These plants are our Fig. 2010-S. At Left—Gaso Portable Pumping Plant Mounted on Trailer—Fig. 2010-W.

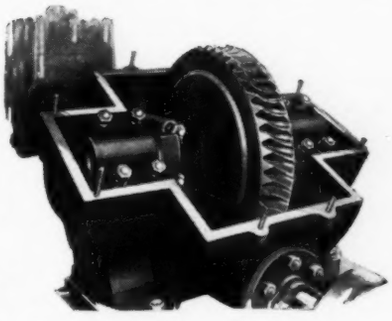
GASO OIL IND

A COMPLETE PORTABLE PUMPING PLANT

For Emergency, Temporary and Semi-Permanent Oil Field Service

The GASO Portable Pumping Plant is the first plant of its kind to be offered to the Oil Industry.

Failure of regular pumping equipment often means serious loss. In other instances, time cannot be taken to put in permanent installations. In such emergencies, the GASO Portable Pumping Plant can be rushed to the scene on its own trailer, and put promptly to work.



Power end of pump, with cover removed, showing bronze worm gear running in oil bath.

The Industry's need of such equipment has been evidenced by our sales in the short year this plant has been on the market. The photograph opposite, shows a battery of 7 of these plants, mounted on skids, supplying water for extensive operations in the Seminole Field, Oklahoma. Leading pipe line companies are using the plant as a temporary pipe line pumping station. Its power and durability suit it admirably for all temporary and semi-permanent pump station and booster service.

An especially valuable feature is the new flood-lubricated worm-drive pump. This pump eliminates the time and labor of daily oiling, and has proved exceptionally long-lived.

SPECIFICATIONS

PUMP—Heavily constructed duplex double acting power pump with interchangeable cylinder liners from 2½" to 5", with 10" stroke. Capacities ranging from 45 barrels per hour at 800 pounds pressure per square inch to 250 barrels per hour at 275 pounds pressure per square inch. Has bronze ring gear and steel worm, with double-thrust ball bearings, all enclosed in housing and running in oil.

Pump is direct connected to the power unit through flexible coupling, to compensate for any distortion when conveying over rough roads and to maintain perfect alignment.

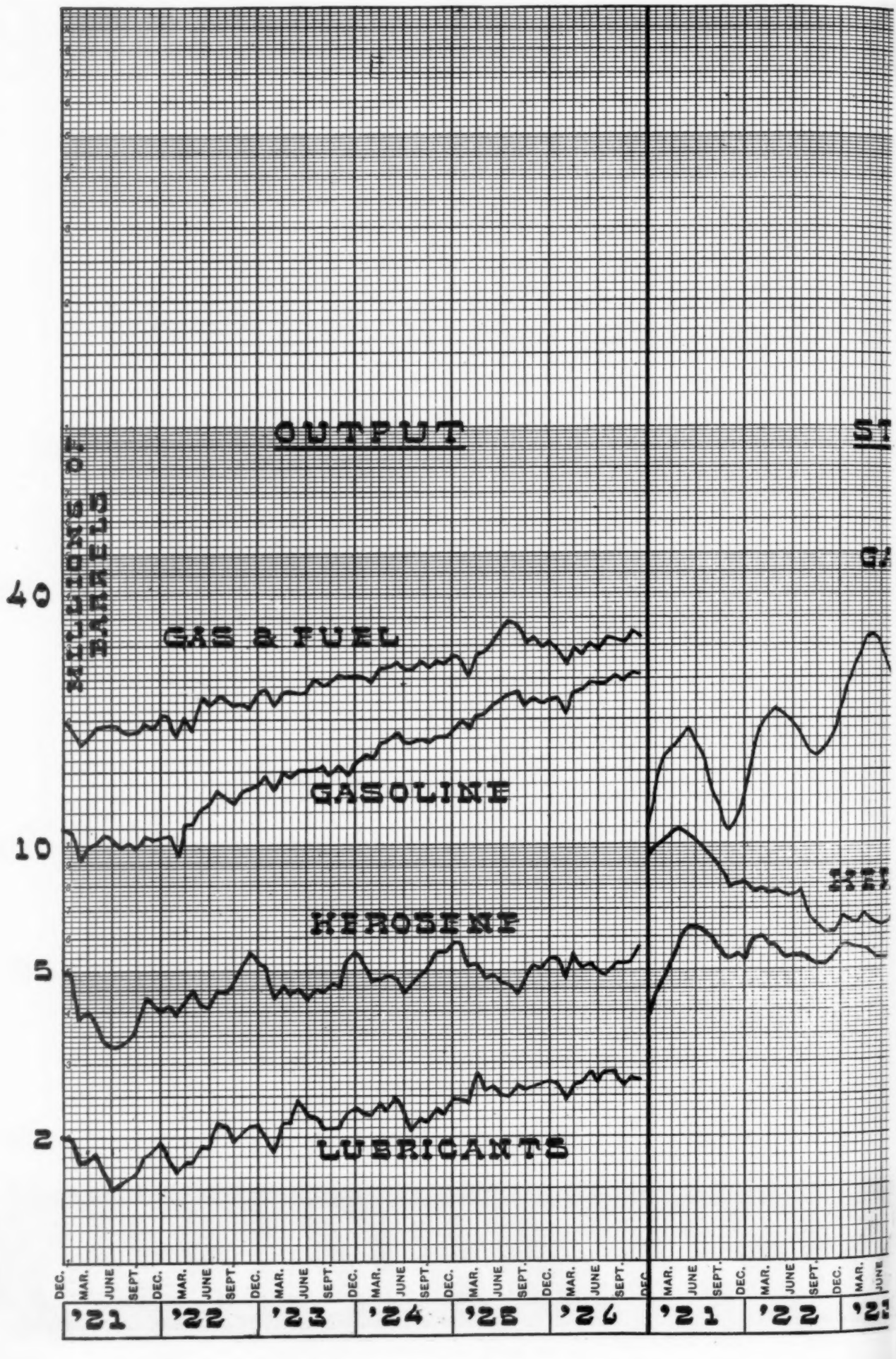
POWER UNIT—40 or 50 H. P. Buda four-cylinder motors equipped with combination gasoline and natural gas carburetor. Pierce Governor.

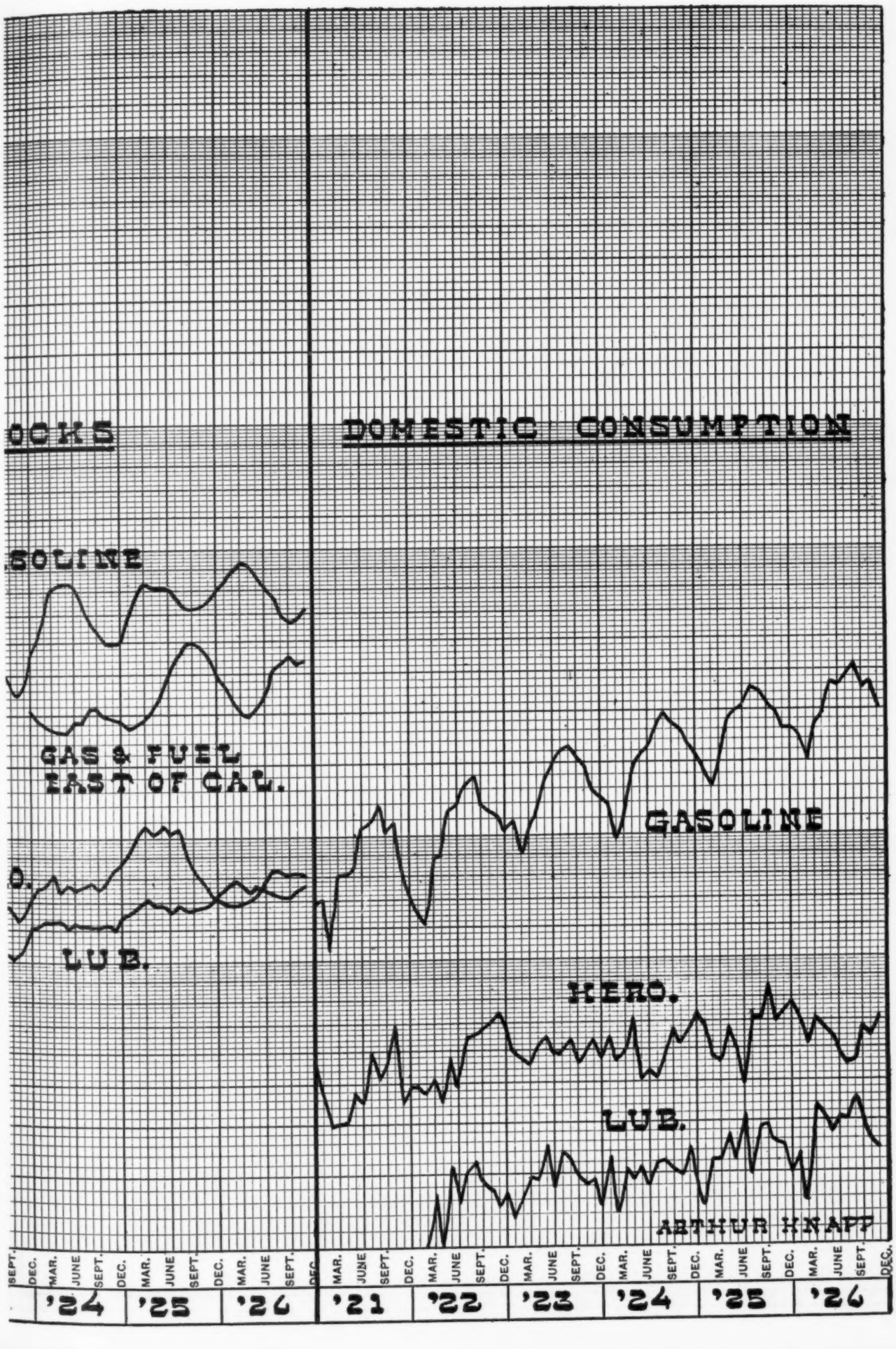
TRAILER—Standard tread, four wooden wheels, equipped with 36x5 Cushion Tires. Special extra large axles with Timken Roller Bearings. Front axle has regular automobile knuckle joint steering arrangement. Frame is constructed of heavy channels and has steel tool box mounted under frame, all resting on four 48-inch, 12-leaf Vanadium Steel Springs. Designed to be transported at regular truck speed.

Also furnished mounted on skids. Ask for full details.

GASO PUMP & BURNER MFG. COMPANY
TULSA, OKLAHOMA

STRY PUMPS


OUTPUT
MILLIONS OF BARRELS
40
10
5
2
GAS & FUEL
GASOLINE
KEROSINE
LUBRICANTS
DEC. MAR. JUNE SEPT.
'21
'22
'23
'24
'25
'26
'21
'22


OCKS
DOMESTIC CONSUMPTION
SOLINE
GAS & FUEL
EAST OF CAL.
LUB.
GASOLINE
KERO.
LUB.
ARTHUR KNAPP
SEPT. DEC. MAR. JUNE SEPT. DEC. MAR. JUNE SEPT. DEC. MAR. JUNE SEPT. DEC. MAR. JUNE SEPT. DEC. MAR. JUNE SEPT. DEC. MAR. JUNE SEPT. DEC. MAR. JUNE SEPT. DEC.
'24 '25 '26 '21 '22 '23 '24 '25 '26

A GOOD OIL COMPANY

THAT:

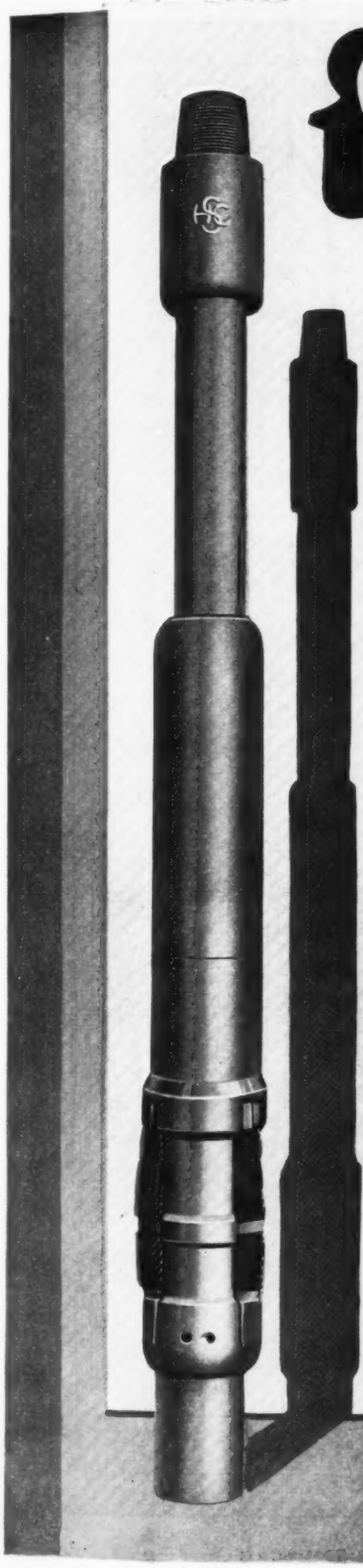
1. Produces its own oil.
2. Manufactures its own natural gasoline.
3. Refines its own REFRACTIONATED gasoline and makes its own TAGOLENE motor oil.
4. Sells its products to the public through its own chain of service stations and selected jobbers and dealers.
5. Is operated by practical oil men.

That Tells the Story of

Skelly Oil Company's Success

HOME OFFICE—TULSA, OKLA.
REFINERY—EL DORADO, KAN. BRANCHES—KANSAS CITY, MO., OMAHA AND MINNEAPOLIS.

Say you saw it in The OIL WEEKLY



this tool will underream 500% more hole

The Smith Expansion Rotary Underreamer has roller cutters, made from a very high grade of special nickel steel—a combination which has resulted in surprising records in service—faster cutting; easy, smooth operation; and much longer runs. In fact, it has proved beyond question in actual service that it will underream 500% more hole than any of the ordinary types of underreamers. And we'll be glad to prove this at any time convenient to you.

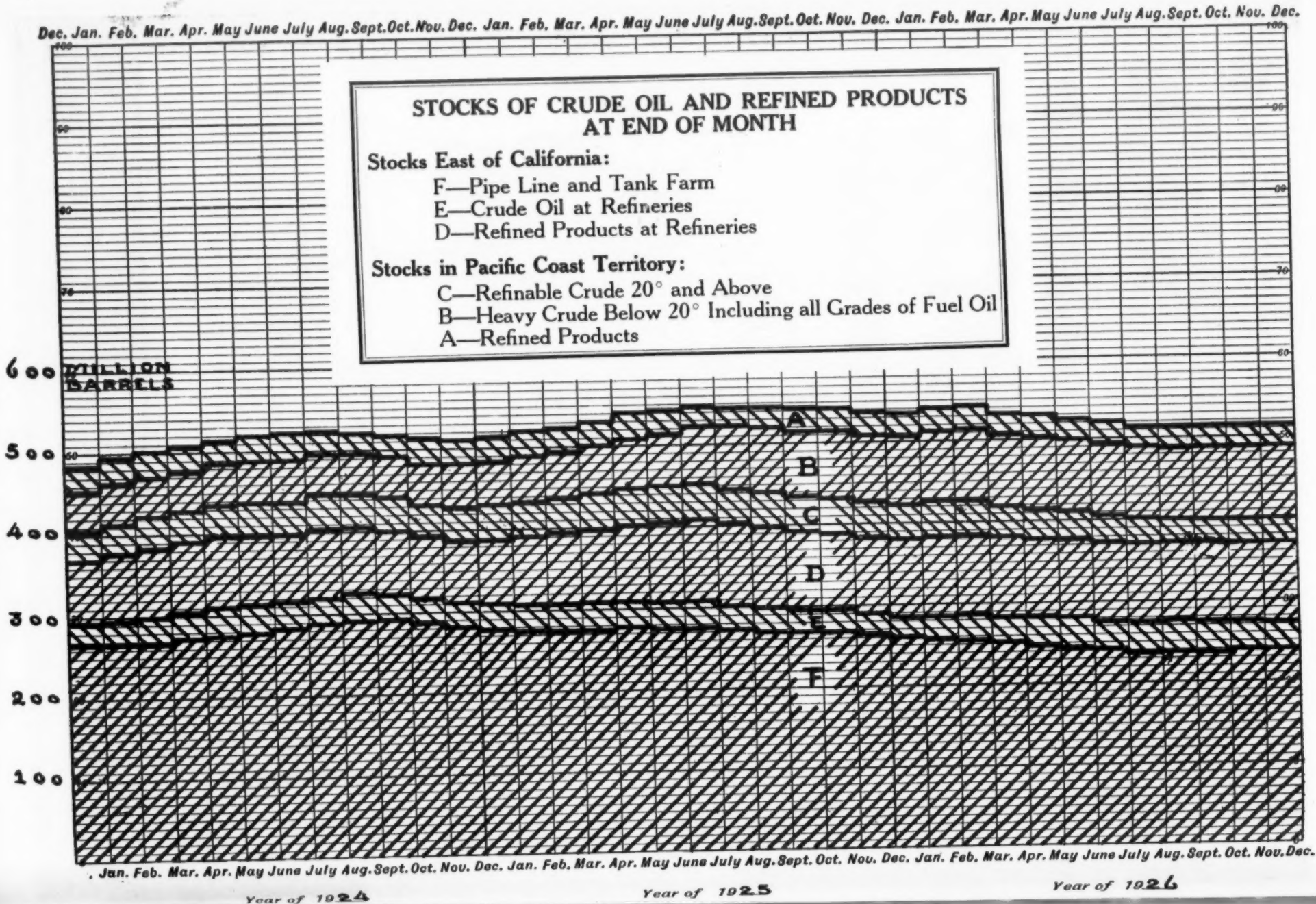
The Smith Underreamer has other advantages that you should know about. Complete information furnished on request.

H. C. SMITH MANUFACTURING CO.
Whittier, California

Branch Offices and Warehouses:
Taft, California
Ventura, California

Harry B. Shine, Sales Agent,
2408 McKinney Ave., Houston, Texas.

All Supply Houses


STOCKS OF CRUDE OIL AND REFINED PRODUCTS AT END OF MONTH
Stocks East of California:
F—Pipe Line and Tank Farm
E—Crude Oil at Refineries
D—Refined Products at Refineries
Stocks in Pacific Coast Territory:
C—Refinable Crude 20° and Above
B—Heavy Crude Below 20° Including all Grades of Fuel Oil
A—Refined Products
MILLION BARRELS
600
500
400
300
200
100
A
B
C
D
E
F
Dec. Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.
Year of 1924
Year of 1925
Year of 1926

PARKERSBURG
Rig Irons
Including Common, California and A. P. I. Standard
☐

PARKERSBURG
Steel Wheels
☐

PARKERSBURG
Steel Derricks and Steel Crown Blocks
☐

PARKERSBURG
All Steel Standard Rigs
☐

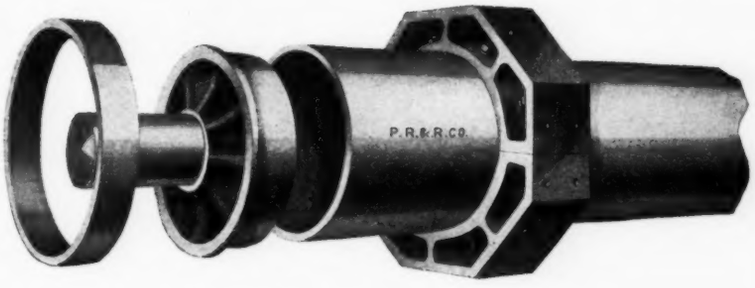
PARKERSBURG
Portable Drilling Machines Wood and All Steel
☐

PARKERSBURG
Chain Driven Sand Reels and Bailing Reels
☐

PARKERSBURG
Bolted Steel Tanks
☐

PARKERSBURG
Miscellaneous Drilling Equipment
☐

Check the equipment in which you are interested, tear out and return this page to us, and we will send complete information.



70 Tons of Hydraulic Pressure —*they can't come loose*

TYPICAL of the quality of design, material and workmanship that goes into Parkersburg Steel Wheels is the method used to apply Bull and Calf Wheel Gudgeons. Forced on the steel shafts with a hydraulic pressure of 70 tons, these *gudgeons can't come loose.*

Other exclusive Parkersburg features impart an ability to render *exceptional* service.

Patented Octagonal Hubs assure perfect alignment and quick assembly. There can be no difficulties or delays due to parts bent in shipment or handling. Rims are rolled from *one-piece pressed steel.* Patented Steel Cant Plates permit quick replacement or tightening of wood filler cants.

The complete line includes Bull, Band, Calf and Replacement Bull Wheels. All of them possess an in-built quality that reflects itself in longer and more economical service in any field.

QUALITY PARKERSBURG SERVICE

The Parkersburg RIG & REEL COMPANY

Main Office and Works, Parkersburg, W. Va.

Sales Offices and Stocks Carried in Every Producing Field

Say you saw it in The OIL WEEKLY

Hot Surface Paint withstands 850° fahrenheit!

Continental salesmen can deliver this superior hot-surface paint to you **within a few hours** after you ask for it—for every Continental Store carries a substantial stock ready for instant delivery.

TNEMEC Hot Surface Paint is unsurpassed for its purpose. It comes ready for use; requires no thinning; can be applied on a hot or cold surface, and dries to a glossy, enamel-like finish. Covers solid, in one coat, at rate of 400 square feet to a gallon. Withstands a temperature of 850° Fahrenheit. Made in black only.

Try TNEMEC on your next hot-surface job.

"If CONTINENTAL Sells It, There Is No Better"

THE CONTINENTAL SUPPLY COMPANY
General Offices: St. Louis
Export Office: 2 Rector St., New York
London Office: 316-317 Dashwood House, Old Broad St., E. C. 2

CONTINENTAL

World's Production of Crude Petroleum Since 1857, by Years and Countries, in Barrels of 42 Gallons

Year	Rumania	United States	Italy	Canada	Russia	Galicia	Japan and Formosa	Germany	India	Dutch East Indies	Peru	Mexico	Argentina	Trinidad	Egypt	Other Countries	Total	Year	Pct., Prod. by U. S.
1857	1,977	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,977	1857	.00
1858	3,560	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,560	1858	.00
1859	4,349	2,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,349	1859	31.5
1860	8,542	500,000	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	508,578	1860	98.3
1861	17,279	2,113,609	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,130,917	1861	99.1
1862	23,198	3,056,690	29	11,775	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,091,692	1862	98.8
1863	27,943	2,611,309	58	82,814	40,816	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,762,940	1863	94.5
1864	33,013	2,116,109	72	90,000	64,686	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,303,780	1864	90.5
1865	39,017	2,497,700	2,265	110,000	66,542	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,715,524	1865	91.9
1866	42,534	3,597,700	992	175,000	83,052	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,899,278	1866	92.3
1867	50,838	3,347,300	791	190,000	119,917	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,708,846	1867	90.2
1868	55,369	3,646,117	367	200,000	88,327	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,990,180	1868	91.2
1869	58,533	4,215,000	144	220,000	202,308	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,695,985	1869	89.9
1870	83,765	5,260,745	86	250,000	204,618	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,799,214	1870	90.7
1871	90,030	5,205,234	273	269,397	165,129	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,730,063	1871	90.8
1872	91,251	6,293,194	131	308,100	184,391	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,877,067	1872	91.5
1873	104,036	9,893,786	467	365,052	474,379	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,837,720	1873	91.3
1874	103,177	10,926,945	604	168,807	583,751	149,837	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,933,121	1874	91.5
1875	108,569	8,787,514	813	220,000	697,364	158,522	4,566	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,977,348	1875	88.1
1876	111,314	9,132,669	2,891	312,000	1,320,528	164,157	7,708	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,051,267	1876	82.6
1877	108,569	13,350,363	2,934	312,000	1,800,720	169,792	9,560	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,753,938	1877	85.4
1878	109,300	15,396,898	4,329	312,000	2,400,960	175,420	17,884	.....	.....	.....	.....	.....	.....	.....	.....	.....	18,416,761	1878	84.2
1879	110,007	19,914,146	2,891	575,000	2,761,104	214,800	23,457	.....	.....	.....	.....	.....	.....	.....	.....	.....	23,601,405	1879	84.3
1880	114,321	26,286,123	2,035	350,000	3,001,200	229,120	25,497	9,310	.....	.....	.....	.....	.....	.....	.....	.....	30,017,606	1880	87.6
1881	121,511	27,661,238	1,237	275,000	3,601,441	286,400	16,751	29,219	.....	.....	.....	.....	.....	.....	.....	.....	31,992,797	1881	86.4
1882	136,610	30,349,897	1,316	275,000	4,537,815	330,076	15,549	58,025	.....	.....	.....	.....	.....	.....	.....	.....	35,704,288	1882	85.0
1883	139,486	23,449,633	1,618	250,000	6,002,401	365,160	20,473	26,708	.....	.....	.....	.....	.....	.....	.....	.....	30,255,479	1883	77.5
1884	210,867	24,218,438	2,855	250,000	10,804,577	408,120	27,923	46,161	.....	.....	.....	.....	.....	.....	.....	.....	35,968,741	1884	67.3
1885	193,411	21,858,785	1,941	250,000	13,924,596	465,400	29,237	41,360	.....	.....	.....	.....	.....	.....	.....	.....	36,764,730	1885	59.4
1886	168,606	28,064,841	1,575	584,061	18,006,407	305,884	37,916	73,864	.....	.....	.....	.....	.....	.....	.....	.....	47,243,154	1886	59.4
1887	181,907	28,283,483	1,496	525,655	18,367,781	343,832	28,645	74,284	.....	.....	.....	.....	.....	.....	.....	.....	47,807,083	1887	59.2
1888	218,576	27,612,025	1,251	695,203	23,048,787	466,537	37,436	84,782	.....	.....	.....	.....	.....	.....	.....	.....	52,164,597	1888	59.9
1889	297,666	35,163,513	1,273	704,690	24,609,407	515,268	52,811	68,217	94,250	.....	.....	.....	.....	.....	.....	.....	61,507,095	1889	57.2
1890	383,227	45,823,572	2,998	795,030	28,691,218	659,012	51,420	108,296	118,065	.....	.....	.....	.....	.....	.....	.....	76,632,838	1890	59.9
1891	488,201	54,292,655	8,305	755,298	34,573,181	630,730	52,917	108,929	140,131	.....	.....	.....	.....	.....	.....	.....	91,100,347	1891	59.6
1892	593,175	50,514,657	18,321	779,753	35,774,504	646,220	68,901	101,404	242,284	.....	.....	.....	.....	.....	.....	.....	88,739,219	1892	56.9
1893	535,655	48,431,066	19,069	798,406	40,456,519	697,669	106,384	99,390	298,969	600,000	.....	.....	.....	.....	.....	.....	92,038,127	1893	52.6
1894	507,255	49,344,516	20,552	829,104	36,375,428	949,146	171,744	122,564	327,218	688,170	.....	.....	.....	.....	.....	.....	89,335,697	1894	55.2
1895	575,200	52,892,276	25,843	726,138	46,140,174	1,452,999	141,310	121,277	371,536	1,215,757	.....	.....	.....	.....	.....	.....	103,662,510	1895	51.0
1896	543,348	60,960,361	18,149	726,822	47,220,633	2,443,080	197,082	145,061	429,979	1,427,132	47,536	.....	.....	.....	.....	.....	114,159,183	1896	53.4
1897	570,886	60,475,516	13,892	709,857	54,399,568	2,226,368	218,559	165,745	545,704	2,551,649	70,831	.....	.....	.....	.....	.....	121,948,575	1897	49.5
1898	776,238	55,364,233	14,489	758,391	61,609,357	2,376,108	265,389	183,427	542,110	2,964,035	70,905	.....	.....	.....	.....	.....	124,924,682	1898	44.4
1899	1,425,777	57,070,850	16,121	808,570	65,954,968	2,313,047	536,079	192,232	940,971	1,795,961	89,166	.....	.....	.....	.....	.....	131,143,742	1899	43.5
1900	1,628,535	63,620,529	12,102	913,498	75,279,417	2,346,505	866,814	358,297	1,078,264	2,253,355	274,800	.....	.....	.....	.....	.....	149,132,116	1900	42.5
1901	1,678,320	69,389,194	16,150	756,679	85,168,556	3,251,544	1,110,790	313,630	1,430,716	4,013,710	274,800	10,345	.....	.....	.....	20,000	167,434,434	1901	41.4
1902	2,059,935	88,766,916	18,933	530,624	80,540,044	4,142,159	1,193,038	353,674	1,617,363	2,430,465	286,725	40,200	.....	.....	.....	26,000	182,006,076	1902	48.8
1903	2,763,117	100,461,337	17,876	486,637	75,591,256	5,234,475	1,209,371	445,818	2,510,259	5,770,056	278,092	75,375	.....	.....	.....	36,000	194,879,669	1903	51.5
1904	3,599,026	117,080,960	25,476	552,575	78,536,655	5,947,383	1,419,473	637,431	3,385,468	6,508,485	345,834	125,625	.....	.....	.....	40,000	218,204,391	1904	53.7
1905	4,420,987	134,717,580	44,027	634,095	54,960,270	5,765,317	1,472,804	560,963	4,137,098	7,849,896	447,880	251,750	.....	.....	.....	30,000	215,292,167	1905	62.6
1906	6,378,184	126,493,936	53,577	569,753	58,897,311	5,467,967	1,710,768	578,610	4,015,803	8,180,657	536,294	502,500	.....	.....	.....	30,000	213,415,360	1906	59.2
1907	8,118,207	166,095,335	59,875	788,872	61,850,734	8,455,841	2,001,838	756,631	4,344,162	9,982,597	756,226	1,005,000	101	.....	.....	30,000	264,245,419	1907	63.2
1908	8,252,157	178,527,355	50,966	527,987	62,186,447	12,612,295	2,070,145	1,009,778	5,047,038	10,283,357	1,011,180	3,932,900	11,472	169	.....	30,000	285,552,746	1908	62.5
1909	9,327,278	183,170,874	42,388	420,755	65,970,350	14,932,799	1,889,563	1,018,837	6,676,517	11,041,852	1,316,118	2,713,500	18,431	57,143	.....	20,000	298,616,405	1909	61.3
1910	9,723,806	209,557,248	50,830	315,895	70,336,574	12,673,688	1,930,661	1,032,522	6,137,990	11,030,620	1,330,105	3,634,000	29,753	142,857	.....	20,000	327,937,629	1910	64.0
1911	11,107,450	220,449,391	74,709	291,096	66,183,691	10,519,270	1,638,903	1,017,045	6,451,203	12,172,949	1,368,274	12,552,798	13,119	285,307	9,150	20,000	344,174,355	1911	64.0
1912	12,976,232	222,935,044	53,778	243,336	68,019,208	8,535,174	1,671,405	1,031,050	7,116,672	10,845,624	1,751,143	16,558,215	47,007	436,805	205,905	20,000	352,446,598	1912	68.9
1913	13,554,768	248,446,230	47,198	228,080	62,834,356	7,818,130	1,942,009	995,764	7,930,149	11,172,294	2,133,261	25,696,291	130,618	503,616	94,635	20,000	383,547,399	1913	64.7
1914	12,826,579	265,762,535	39,849	214,805	67,070,522	5,033,350	2,738,378	995,764	7,409,792	11,834,802	1,917,802	26,235,403	275,500	643,533	777,038	20,000	403,745,342	1914	65.8
1915	12,029,913	281,104,104	43,898	215,464	68,548,062	4,158,899	3,118,464	995,764	8,202,674	12,386,800	2,487,251	32,910,508	516,120	750,000	262,208	10,000	427,740,129	1915	65.7
1916	10,298,208	300,767,158	50,585	198,123	72,801,110	6,461,706	2,997,178	995,764	8,491,137	13,174,399	2,550,645	40,545,712	796,920	928,581	411,000	25,000	461,493,226	1916	65.2
1917	2,681,870	335,315,601	50,334	265,332	69,000,000	5,965,447	2,898,654	995,764	8,078,843	12,928,955	2,533,417	55,292,770	1,144,737	1,599,455	1,008,750	7,004,973	506,702,902	1917	66.2
1918	8,730,235	355,927,716	35,953	304,741	40,456,182	5,591,620	2,449,069	711,260	8,000,000	13,284,936	2,536,102	63,828,377	1,321,315	2,082,068	2,079,750	7,390,080	514,729,354	1918	69.1
1919	6,614,000	377,719,000	35,000	241,000	25,495,000	6,054,000	2,175,000	234,000	8,735,000	15,428,000	2,616,000	87,073,000	1,183,000	1,841,000	1,501,000	750,000	544,885,000	1919	62.0
1920	7,435,344	443,402,000	34,180	196,937	25,429,600	5,606,116	2,139,777	212,046	7,500,000	17,529,210	2,816,649	163,540,000	1,665,989	2,083,027	1,042,000	14,221,125	694,854,000	1920	63.8
1921	8,368,000	427,183,000	34,400	190,338	29,150,000	5,167,000	2,447,000	200,000	8,000,000	16,958,105	3,699,780	193,397,587	1,747,410	2,354,000	1,255,000	19,913,880	765,065,000	1921	61.7
1922	9,843,000	557,531,000	31,000	179,000	32,966,000	.....	2,042,000	319,000	7,700,000	16,720,000	5,314,000	182,278,000	3,018,000	2,445,000	1,188,000	33,235,000	854,809,000	1922	65.2
1923	10,867,000	732,407,000	34,000	170,000	39,156,000	5,373,000	1,789,000	312,000	8,320,000	19,868,000	5,699,000	149,858,000	3,400,000	3,051,000	1,054,000	37,855,000	1,019,213,000	1923	71.3
1924	13,000,000	710,463,600	.....	170,000	44,600,000	5,750,000	1,666,660	33,330	8,000,000	21,000,000	6,000,000	144,000,000	4,000,000	3,333,330	1,000,000	44,045,000	1,009,461,920	1924	70.3
1925	16,646,000	763,743,000	45,000	318,000	52,448,000	5,960,000	2,000,000	411,000	8,000,000	21,422,000	9,164,000	115,515,000	5,818,000	4,654,000	1,726,000	60,196,000	1,067,566,000	1925	71.5
1926	23,500,000	766,504,000	45,000	350,000	62,000,000	5,600,000	1,820,000	600,000	8,000,000	21,700,000	11,000,000	90,700,000	6,500,000	5,500,000	1,250,000	83,863,000	1,096,690,000	1926	69.9
Totals	247,685,000	9,468,679,600	1,241,800	26,241,000	2,164,841,000	193,561,350	21,574,660	18,995,330	171,478,000	337,252,000	70,673,000	1,412,320,000	31,708,000	32,694,330	13,937,000	*308,871,058	14,549,405,100		Totals

*Includes: Venezuela, 37,238,000 barrels; Persia, 35,400,000 barrels; Colombia, 6,000,000 barrels; Sarawok, 4,500,000 barrels; France, 550,000 barrels; Czechoslovakia, 50,000 barrels; Algeria, 12,000 barrels; Cuba, 4,000 barrels, and others, 109,000 barrels.

Petroleum Marketed in the United States, 1859-1926, in Barrels of 42 Gallons

Figures taken from Petroleum Statistics compiled by the Department of Commerce

Year	Pennsylvania and New York	Ohio	West Virginia	California	Kentucky and Tennessee	Colorado	Indiana	Illinois	Kansas	Texas	Missouri	Oklahoma	Wyoming (Includes Montana and New Mexico)	Louisiana	United States	Total Value	Year
1859	2,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,000	$ 32,000	1859
1860	500,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	500,000	4,800,000	1860
1861	2,113,609	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,113,609	1,035,668	1861
1862	3,056,690	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,056,690	3,209,525	1862
1863	2,611,309	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,611,309	8,225,663	1863
1864	2,116,109	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,116,109	20,896,576	1864
1865	2,497,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,497,700	16,459,853	1865
1866	3,597,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,597,700	30,455,398	1866
1867	3,347,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,347,300	8,066,993	1867
1868	3,646,117	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,646,117	13,217,174	1868
1869	4,215,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,215,000	23,730,450	1869
1870	5,260,745	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,260,745	20,503,754	1870
1871	5,205,234	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,205,234	22,591,180	1871
1872	6,293,194	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,293,194	21,440,503	1872
1873	9,893,786	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,983,786	18,100,464	1873
1874	10,926,945	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,926,945	12,647,527	1874
1875	8,787,514	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,787,514	7,368,133	1875
1876	8,968,906	31,763	120,000	12,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,132,669	22,982,822	1876
1877	13,135,475	29,888	172,000	13,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,350,363	31,788,566	1877
1878	15,163,462	38,179	180,000	15,227	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,396,868	18,044,620	1878
1879	19,685,176	29,112	180,000	19,858	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19,914,146	17,210,708	1879
1880	26,027,631	38,940	179,000	40,552	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26,286,123	24,600,638	1880
1881	27,376,509	33,867	151,000	99,862	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,661,238	25,448,339	1881
1882	30,053,500	39,761	128,000	128,636	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30,349,897	23,631,165	1882
1883	23,128,389	47,632	126,000	142,857	4,755	.....	.....	.....	.....	.....	.....	.....	.....	.....	23,449,663	25,790,252	1883
1884	23,772,209	90,081	90,000	262,000	4,148	.....	.....	.....	.....	.....	.....	.....	.....	.....	24,218,438	20,595,966	1884
1885	20,776,041	661,580	91,000	325,000	5,164	.....	.....	.....	.....	.....	.....	.....	.....	.....	21,858,785	19,198,243	1885
1886	25,798,000	1,782,970	102,000	377,145	4,726	.....	.....	.....	.....	.....	.....	.....	.....	.....	28,064,841	19,996,313	1886
1887	22,356,193	5,022,632	145,000	678,572	4,791	76,295	.....	.....	.....	.....	.....	.....	.....	.....	28,283,483	18,877,094	1887
1888	16,488,668	10,010,868	119,448	690,333	5,096	297,612	.....	.....	.....	.....	.....	.....	.....	.....	27,612,025	17,947,620	1888
1889	21,487,435	12,471,466	544,113	303,220	5,400	316,476	33,375	1,460	500	48	20	.....	.....	.....	35,163,513	26,963,340	1889
1890	28,458,208	16,124,656	492,578	307,360	6,000	368,842	63,496	900	1,200	54	278	.....	.....	.....	45,823,572	35,365,105	1890
1891	33,009,236	17,740,301	2,406,218	323,600	9,000	655,482	136,634	675	1,400	54	25	30	.....	.....	54,292,655	30,529,553	1891
1892	28,422,377	16,362,921	3,810,086	385,049	6,500	824,000	136,634	521	5,000	45	10	80	.....	.....	50,514,657	25,906,463	1892
1893	20,314,513	16,249,769	8,445,412	470,179	3,000	594,390	2,335,293	400	18,000	50	50	10	.....	.....	48,431,066	28,950,326	1893
1894	19,019,990	16,792,154	8,577,624	705,969	1,500	515,746	3,688,666	300	40,000	60	8	130	2,369	.....	49,344,516	35,522,095	1894
1895	19,144,390	19,545,233	8,120,125	1,208,482	1,500	438,232	4,386,132	200	44,430	50	10	37	3,455	.....	52,892,276	57,632,296	1895
1896	20,584,421	23,941,169	10,019,770	1,252,777	1,680	361,450	4,680,732	250	113,571	1,450	43	170	2,878	.....	60,960,361	58,518,709	1896
1897	19,262,066	21,560,515	13,090,045	1,903,411	322	384,934	4,122,356	500	81,098	65,975	19	625	3,650	.....	60,475,516	40,874,072	1897
1898	15,948,464	18,738,708	13,615,101	2,257,207	5,568	444,383	3,730,907	360	71,980	546,070	10	.....	5,475	.....	55,364,233	44,193,359	1898
1899	14,374,512	21,142,108	13,910,630	2,642,095	18,280	390,278	3,848,182	360	69,700	669,013	132	.....	5,560	.....	57,070,850	64,603 904	1899
1900	14,559,127	22,362,730	16,195,675	4,324,484	62,259	317,385	4,874,392	200	74,714	836,039	[1]1,692	6,472	5,450	.....	63,620,529	75,989,313	1900
1901	13,831,996	21,648,083	14,177,126	8,786,330	137,259	460,520	5,757 086	250	179,151	4,393,658	[2]2,335	10,000	5,400	.....	69,389,194	66,417,335	1901
1902	13,183,610	21,014,231	13,513,345	13,984,268	185,331	396,901	7,480,896	200	331,749	18,083,658	[3]757	37,100	6,253	548,617	88,766,916	71,178,910	1902
1903	12,518,134	20,480,286	12,899,395	24,382,372	554,286	483,925	9,186,411	.....	932,214	17,955,572	[3]3,000	138,911	8,960	917,771	100,461,337	94,694,050	1903
1904	12,239,026	18,876,631	12,644,686	29,649,434	998,284	501,763	11,339,124	.....	4,250,779	22,241,413	[3]2,572	1,366,748	11,542	2,958,958	117,080,960	101,175,455	1904
1905	11,554,777	16,346,660	11,578,110	33,427,473	1,217,337	376,238	10,964,247	181,084	[4]12,013,495	28,136,189	[3]3,100	([3])	8,454	8,910,416	134,717,580	34,157,399	1905
1906	11,500,410	14,787,763	10,120,935	33,098,598	1,213,548	327,582	7 673,477	4,397,050	[5]21,718,648	12,567,897	[3]3,500	([3])	[6]7,000	9,077,528	126,493,936	92,444,735	1906
1907	11,211,606	12,207,448	9,095,296	39,748,375	820,844	331 851	5,128,037	24,281,973	2,409,521	12,322,696	[3]4,000	43,524,128	[6]9,339	5,000,221	166,095,335	120,106,749	1907
1908	10,584,453	10,858,797	9,523,176	44,854,737	[6]727,767	379,653	3,283,629	33,686,238	1,801,781	11,206,464	[3]15,246	45,798,765	[6]17,775	5,788,874	178,527,355	129,079,184	1908
1909	10,434,300	10,632,793	10,745,092	55,471,601	[6]639,016	310 861	2,296,086	30,898,339	1,263,764	9,534,467	[3]5,750	47,859,218	[6]20,056	3,059,531	183,170,874	128,328,487	1909
1910	9,848,500	9,916,370	11,753,071	73,010,560	[6]468,774	239,794	2,159,725	33,143,362	1,128,668	8,899,266	[3]3,615	52,028,718	[6]115,430	6,841,395	209,557,248	127,899,688	1910
1911	9,200,673	8,817,112	9,795,464	81,134,391	[6]472,458	226,926	1,695,289	31,317,038	1,278,819	9,526,474	[7]7,995	56,069,637	[8]186,695	10,720,420	220,449,391	134,044,752	1911
1912	8,712,076	[3]8,969,007	12,128,962	[6]87,272,593	[6]848,368	206,052	970,009	28 601,308	1,592,796	11,735,057	[3]([8])	51,427,071	1,572,306	9,263,439	222,935,044	164,213,247	1912
1913	8,865,493	8,781,468	11,567,299	97,788,525	[6]524,568	188,568	956,095	23,893,899	2,375,029	15,009,478	[9]10,843	63,579,384	2,406,522	12,498,828	248,446,230	237,121,388	1913
1914	9,109,309	8,536,352	9,680,033	99,775,327	[6]502,441	222,773	1,335,456	21,919,749	3,103,585	20,068,184	[10]7,792	73,631,724	3,560,375	14,309,435	265,762,535	214,125,215	1914
1915	8,726,483	7,825,326	9,264,798	86,591,535	[6]437,274	208,475	875,758	19 041,695	2,823,487	24,942,701	[10]14,265	97,915,243	4,245,525	18,191,539	281,104,104	179,462,890	1915
1916	8,466,481	7,744,511	8,731,184	90,951,936	1,203,246	197,235	769,036	17,714,235	8,738,077	27,644,605	.....	107,071,715	6,234,137	15,248,138	300,767,158	330,899,868	1916
1917	8,612,885	7,750,540	8,379,285	93,877,549	3,100,356	121,231	759,432	15,776,860	36,536,125	32,413,287	.....	107,507,471	8,978,680	11,392,201	[6]335,315,601	522,635,213	1917
1918	8,216,655	7,285,005	7,866,628	97,531,997	4,376,342	143,286	877,558	13,365,974	45,451,017	38,750,031	.....	103,347,070	12,596,287	16,042,600	[6]355,927,716	703,943,961	1918
1919	9,441,936	8,243,592	9,032,688	101,221,784	5,027,904	241,680	929,780	12,436,000	34,769,100	85,312,000	.....	81,127,900	13,342,320	16,250,000	377,719,000	867,753,379	1919
1920	8,360,400	7,412,000	8,173,050	105,668,000	8,692,600	110,000	932,000	10,772,000	38,500,000	96,000,000	.....	105,725,000	17,407,000	35,649,000	443,402,000	1,360,000,000	1920
1921	8,414,000	7,333,000	8,003,000	114,709,000	8,963,000	108,200	1,163,000	10,044,000	36,232,000	103,322,000	.....	113,978,000	20,656,800	26,523,000	469,639,000	753,000,000	1921
1922	8,505,000	6,775,000	7,015,000	[3]38,907,000	9,603,000	96,500	1,089,000	9,409,000	31,891,000	117,106,545	.....	147,414,000	29,177,265	33,889,480	556,207,725	.....	1922
1923	8,590,000	7,123,000	6,452,000	258,387,119	8,110,140	95,500	1,049,000	8,724,000	29,406,925	125,991,628	.....	155,573,392	48,258,170	22,812,685	725,057,305	.....	1923
1924	8,860,000	6,798,000	5,899,000	230,366,303	7,405,300	413,400	938,000	8,082,000	28,351,001	133,613,985	.....	170,180,463	42,480,700	20,595,136	710,463,430	.....	1924
1925	9,596,000	7,226,000	5,859,000	231,768,982	6,835,700	1,123,000	830,000	7,260,000	34,497,756	150,010,406	.....	167,951,575	36,030,875	21,414,878	759,131,872	.....	1925
1926	10,898,000	7,322,000	5,975,000	224,117,000	6,324,000	2,717,000	793,000	7,766,000	41,427,000	161,858,034	.....	179,272,000	33,830,000	22,803,000	766,504,000	.....	1926
Total	860,868,050	521,550,978	349,893,398	2,506,371,764	79,164,832	16,224,550	113,829,364	372,718,380	523,797,080	1,200,442,553	86,997	1,992,542,787	281,202,703	360,707,090	9,527,621,075	.....	Total

Arkansas 1921	10,190,000
Arkansas 1922	15,869,635
Arkansas 1923	44,488,746
Arkansas 1924	46,480,542
Arkansas 1925	78,717,700
Arkansas 1926	59,229,000
Total	254,975,623

[1]Includes Alaska, Michigan and Missouri production, estimated at 10,300 barrels in 1917 and 7,943 barrels in 1918. [2]Includes production of Michigan. [3]Includes production of Oklahoma. [4]Included with Kansas. [5]Estimated. [6]Includes production of Utah. [7]No. production in Tennessee recorded. [8]Includes small production in Alaska. [9]No production in Missouri; Michigan included in Ohio. [10]Includes production of Alaska, Michigan and New Mexico [11]Includes production of Alaska and Michigan.

BOLTS ELIMINATED

In the New Braden Clamp-Joint Derrick

New Clamp Joint of Braden Derrick — Patented

The patented Clamp-Joint of the new BRADEN Steel Derrick, has completely eliminated the use of bolts in connection with the joints. In place of inserting and tightening a multiplicity of bolts, at each joint, one steel pin is simply dropped into position.

The new joint has tremendously reduced erection and dismantling time and labor cost. It has also reduced maintenance cost by eliminating the periodic necessity of going over and tightening all bolts. Finally, it has increased SAFETY, as there is nothing to work loose.

The patented joint is composed of outer and inner plates which grip the legs and girts and are fastened together by means of a single wedge-shaped pin. Holes are provided in the outer plate in which to hook the turnbuckle rods.

Thorough tests have proved beyond question the practicability, durability and great over-strength of the BRADEN Derrick. Ask for full particulars.

Note the BRADEN Steel Engine House and Belt House in the photograph.

THE BRADEN STEEL & WINCH COMPANY
Tulsa, Oklahoma

BRADEN (CLAMP JOINT) DERRICKS

Say you saw it in The OIL WEEKLY

[illegible] 18, 1927

[illegible] Alaska, Michigan and Missouri production, estimated at 10,300 barrels in 1917 and 7,943 barrels in 1918. [illegible] Kansas. [illegible] of Alaska. [illegible]

Petroleum Produced in the United States, 1926, by States

(Thousands of Barrels of 42 U. S. Gallons)
Figures taken from "Petroleum Statistics" Department of Commerce, U. S. Bureau of Mines

State—	January	February	March	April	May	June	July	August	September	October	November	December	The Year
Arkansas	5,435	4,825	5,087	5,405	5,388	5,061	5,073	4,926	4,700	4,591	4,276	4,222	58,989
California	19,070	17,164	18,826	18,092	18,667	18,269	18,743	18,765	18,105	18,966	19,173	20,277	224,117
Colorado	175	189	193	185	216	252	296	271	241	230	230	239	2,717
Illinois	636	600	730	579	651	662	681	670	658	651	617	631	7,766
Indiana—													
Southwestern	53	55	49	54	56	56	56	54	54	53	55	59	654
Northeastern	10	11	11	10	12	14	13	13	13	12	9	11	139
Total, Indiana	63	66	60	64	68	70	69	67	67	65	64	70	793
Kansas	3,205	2,929	3,250	3,376	3,525	3,622	3,721	3,672	3,483	3,577	3,445	3,608	41,413
Kentucky	500	485	530	516	522	526	550	540	530	540	521	516	6,276
Louisiana—													
Gulf Coast	311	290	348	335	298	307	392	387	344	274	295	303	3,884
Northern	1,348	1,227	1,511	1,564	1,786	1,762	1,696	1,655	1,608	1,573	1,538	1,606	18,874
Total, Louisiana	1,659	1,517	1,859	1,899	2,084	2,069	2,088	2,042	1,952	1,847	1,833	1,909	22,758
Michigan	....	....	....	....	....	3	5	7	10	14	20	26	85
Montana	374	464	762	721	764	793	899	776	654	574	484	371	7,636
New Mexico	131	113	127	115	121	127	133	139	156	138	160	167	1,627
New York	147	143	158	165	154	160	174	166	170	176	160	183	1,956
Ohio—													
Central and Eastern	413	408	474	449	440	474	465	466	454	451	452	474	5,420
Northwestern	147	147	168	161	166	181	172	164	158	156	137	145	1,902
Total, Ohio	560	555	642	610	606	655	637	630	612	607	589	619	7,322
Oklahoma	13,740	12,791	14,406	14,492	14,981	14,483	14,894	14,802	14,342	15,847	16,855	17,691	179,324
Pennsylvania	654	634	704	748	747	771	784	784	781	800	758	755	8,920
Tennessee	3	4	3	4	3	4	2	2	2	3	4	3	37
Texas—													
Gulf Coast	2,502	2,302	2,315	2,330	2,409	2,229	3,097	4,386	4,471	4,514	4,697	4,960	40,212
Rest of State	7,978	7,188	8,051	7,917	8,723	9,382	10,576	11,404	11,837	13,307	13,150	13,537	123,050
Total, Texas	10,480	9,490	10,366	10,247	11,132	11,611	13,673	15,790	16,308	17,821	17,847	18,497	163,262
West Virginia	451	443	499	496	492	513	521	507	520	521	491	521	5,975
Wyoming	2,373	2,151	2,289	2,153	2,156	2,090	2,028	1,968	1,909	1,918	1,787	1,736	24,558
United States	59,656	54,563	60,491	59,867	62,277	61,741	64,971	66,524	65,200	68,886	69,314	72,041	765,531

Petroleum Produced in the United States, 1926, Classified by Gravity (Approximate)

(Thousands of Barrels of 42 U. S. Gallons)
Figures taken from "Petroleum Statistics" Department of Commerce, U. S. Bureau of Mines

1926	January	February	March	April	May	June	July	August	September	October	November	December	The Year
Light crude (24° (0.910) and lighter)	42,457	39,560	44,085	43,375	51,219	51,065	53,072	54,159	53,516	56,774	57,341	59,656	606,249
Heavy crude (heavier than 24° A. P. I.)	17,199	15,004	16,407	16,493	11,059	10,677	11,821	12,366	11,784	12,269	12,172	12,405	159,656
Total	59,656	54,564	60,492	59,868	62,278	61,742	64,893	66,525	65,300	69,043	69,483	72,061	765,905

A

Complete Cycle

in the

Oil and Gas Industry

From the Well to the Consumer

CITIES SERVICE OILS

ONCE—ALWAYS

EMPIRE COMPANIES

Bartlesville, Oklahoma

California's Petroleum Production

FROM THE BEGINNING OF THE INDUSTRY TO DECEMBER 31, 1926, By FIELDS

Compiled from data furnished by federal and state bureaus, the American Petroleum Institute, and the Independent Oil Producers Agency

(Barrels of 42 U. S. Gallons)

Year	Kern River	McKittrick	Midway	Sunset	Elk Hills	Coalinga	Lost Hills-Belridge	Santa Maria-Lompoc	Coyote	Montebello	Richfield	Whittier	Santa Fe Springs
Prior	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1876	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1877	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1878	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1879	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1880	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1881	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1882	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1888	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1894	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1896	.....	.....	.....	.....	.....	14,119	.....	.....	.....	.....	.....	.....	.....
1897	.....	.....	.....	.....	.....	70,140	.....	.....	.....	.....	.....	.....	.....
1898	.....	10,000	.....	.....	.....	154,000	.....	.....	.....	.....	.....	.....	.....
1899	.....	15,000	.....	.....	.....	439,372	.....	.....	.....	.....	.....	.....	.....
1900	826,775	80,000	.....	12,500	.....	547,960	.....	.....	.....	.....	.....	.....	.....
1901	3,278,840	430,450	4,235	188,600	.....	525,433	.....	.....	.....	.....	.....	.....	.....
1902	8,988,046	619,296	3,048	167,558	.....	571,233	.....	94,188	.....	.....	.....	.....	.....
1903	16,342,099	1,353,206	27,305	352,565	.....	2,138,058	.....	204,890	.....	.....	.....	.....	.....
1904	17,226,240	1,856,225	910	390,425	.....	5,097,853	.....	700,450	.....	.....	.....	.....	.....
1905	15,253,845	1,373,030	18,530	419,212	.....	8,882,125	.....	3,402,800	.....	.....	.....	.....	.....
1906	12,825,166	680,756	11,800	307,550	.....	8,401,105	.....	4,799,411	.....	.....	.....	.....	.....
1907	12,346,014	2,415,840	149,944	704,805	.....	8,996,268	.....	8,249,236	.....	.....	.....	.....	.....
1908	13,803,579	3,076,300	434,578	1,463,510	.....	10,725,795	.....	8,699,350	.....	.....	.....	.....	.....
1909	14,508,242	5,807,360	2,234,455	1,999,701	.....	15,406,619	.....	8,017,455	.....	.....	.....	.....	.....
1910	14,776,435	5,471,613	11,174,207	9,218,904	.....	18,646,570	4,900	7,607,830	.....	.....	.....	.....	.....
1911	14,078,890	5,477,532	21,584,602	5,559,069	.....	18,311,251	168,410	7,465,074	.....	.....	.....	.....	.....
1912	12,446,445	5,094,465	25,948,980	5,590,824	.....	19,546,122	2,680,961	6,801,966	1,359,303	.....	.....	747,439	.....
1913	9,980,940	4,496,842	33,040,129	5,984,651	.....	18,604,626	5,274,553	5,817,711	3,777,359	.....	.....	690,133	.....
1914	7,030,545	3,820,857	37,479,228	12,546,615	.....	15,925,887	4,830,921	4,303,080	6,998,659	.....	.....	636,789	.....
1915	8,034,974	3,552,801	33,311,486	6,006,607	.....	13,548,159	4,318,550	4,536,840	6,610,508	.....	.....	758,163	.....
1916	8,402,525	3,230,644	32,156,818	6,768,658	.....	14,381,493	4,852,431	4,422,410	8,588,699	.....	.....	1,014,667	.....
1917	8,495,610	3,252,544	29,487,812	7,072,333	.....	15,938,543	6,295,329	5,798,070	11,458,471	789,635	.....	1,156,752	.....
1918	7,921,515	3,050,627	27,439,993	6,608,940	.....	16,283,066	5,420,079	7,143,750	12,514,598	6,839,267	.....	1,046,467	.....
1919	7,563,025	2,810,848	26,133,048	5,589,885	281,019	16,385,610	4,554,821	6,030,910	10,240,359	12,100,784	965,408	1,001,048	.....
1920	7,456,515	2,607,240	25,217,420	5,423,781	7,275,809	15,464,198	4,139,767	5,928,060	8,732,435	11,124,585	2,565,346	842,184	.....
1921	6,715,680	2,056,101	24,172,350	4,613,965	18,085,425	12,340,637	3,261,281	5,563,324	7,419,050	9,065,723	8,206,962	735,376	208,216
1922	7,317,288	2,417,434	24,152,026	5,542,816	11,891,030	9,159,368	2,814,824	3,797,903	7,000,373	6,692,024	8,314,528	717,729	11,032,955
1923	6,816,134	2,191,702	27,803,281		8,174,371	5,210,839	1,843,483	3,003,672	2,447,825	4,075,669	6,121,335	645,219	79,781,275
1924	6,765,977	2,092,940	37,559,084		13,675,686	10,084,725	1,527,878	2,864,792	5,716,479	6,214,762	4,443,548	767,805	26,434,535
1925	5,951,217	2,096,736	37,391,003		11,833,366	7,811,886	1,736,960	2,652,427	7,188,569	6,895,949	4,258,973	741,090	19,090,766
1926	4,358,396	1,961,028	33,968,755		12,292,754	7,295,807	1,693,666	1,852,356	6,030,619	6,515,493	5,574,244	746,125	17,446,709
Totals	259,510,957	73,199,417	583,438,501		83,519,451	296,908,857	55,418,814	119,757,955	106,183,306	70,313,891	40,450,344	12,246,986	153,994,454

Figures for MIDWAY and SUNSET fields are Combined after 1922

(*Continued on page* 130)

Service Headquarters—Your emergency our service

Here Is An Institution Specializing in·

KINZBACH SELF-LOCKING WHIPSTOCK

the ideal, succcessful, guaranteed, side-tracking tool—invented by a man with years of experience with one of the country's LEADING oil companies.

Products For Sale by Supply Stores

Kinzbach Whipstock

Forged Steel, accurately machined, carefully, threaded.

SET SHOES—CASING SHOES
DRIVE SHOES

Stocked in all sizes.

Information Gladly Given

ALSO FLANGES, AND DRILLED TO YOUR SPECIFICATIONS OR ALL STANDARD, DRILLING — LUDLOW GATE VALVES — BOILER TUBES

Harrisburg Pipe & Pipe Bending Co.

OF TEXAS, Inc.

SAWYER AND WINTERS STS. Preston 3839 HOUSTON, TEXAS

California's Petroleum Production

(*Continued from page* 128)

Year	Huntington Beach	Fullerton	Long Beach	Summerland	Newhall and Ventura Co.	Los Angeles and Salt Lake	Torrance	Wheeler Ridge	Dominguez	Rosecrans	Inglewood	Seal Beach	Miscellaneous	Total
Prior	.....	.....	.....	.....	175,000	.....	.....	.....	.....	.....	.....	.....	.....	175,000
1876	.....	.....	.....	.....	12,000	.....	.....	.....	.....	.....	.....	.....	.....	12,000
1877	.....	.....	.....	.....	13,000	.....	.....	.....	.....	.....	.....	.....	.....	13,000
1878	.....	.....	.....	.....	15,227	.....	.....	.....	.....	.....	.....	.....	.....	15,227
1879	.....	.....	.....	.....	19,858	.....	.....	.....	.....	.....	.....	.....	.....	19,858
1880	.....	.....	.....	.....	40,552	.....	.....	.....	.....	.....	.....	.....	.....	40,552
1881	.....	.....	.....	.....	99,862	.....	.....	.....	.....	.....	.....	.....	.....	99,862
1882	.....	.....	.....	.....	128,636	.....	.....	.....	.....	.....	.....	.....	.....	128,636
1883	.....	.....	.....	.....	142,857	.....	.....	.....	.....	.....	.....	.....	.....	142,857
1884	.....	.....	.....	.....	262,000	.....	.....	.....	.....	.....	.....	.....	.....	262,000
1885	.....	Early	.....	.....	325,000	.....	.....	.....	.....	.....	.....	.....	.....	325,000
1886	.....	production	.....	.....	377,145	.....	.....	.....	.....	.....	.....	.....	.....	377,145
1887	.....	included	.....	.....	678,572	.....	.....	.....	.....	.....	.....	.....	.....	678,572
1888	.....	under	.....	.....	690,333	.....	.....	.....	.....	.....	.....	.....	.....	690,333
1889	.....	Newhall	.....	.....	303,220	.....	.....	.....	.....	.....	.....	.....	.....	303,220
1890	.....	and	.....	.....	307,360	.....	.....	.....	.....	.....	.....	.....	.....	307,360
1891	.....	Ventura	.....	.....	323,600	.....	.....	.....	.....	.....	.....	.....	.....	323,600
1892	.....	County	.....	.....	385,049	.....	.....	.....	.....	.....	.....	.....	.....	385,049
1893	.....	.....	.....	.....	470,179	.....	.....	.....	.....	.....	.....	.....	.....	470,179
1894	.....	.....	.....	1,800	570,469	196,094	.....	.....	.....	.....	.....	.....	14,715	783,078
1895	.....	.....	.....	16,904	474,624	749,695	.....	.....	.....	.....	.....	.....	4,116	1,245,339
1896	.....	.....	.....	39,792	298,866	902,868	.....	.....	.....	.....	.....	.....	2,135	1,257,780
1897	.....	12,000	.....	130,136	631,135	1,064,158	.....	.....	.....	.....	.....	.....	4,000	1,911,569
1898	.....	60,000	.....	132,217	763,871	1,126,000	.....	.....	.....	.....	.....	.....	3,000	2,249,088
1899	.....	217,599	.....	208,370	743,998	1,052,036	.....	.....	.....	.....	.....	.....	1,500	2,677,875
1900	.....	511,550	.....	183,486	628,734	1,280,000	.....	.....	.....	.....	.....	.....	248,945	4,319,950
1901	.....	753,198	.....	203,616	495,943	1,830,000	.....	.....	.....	.....	.....	.....	.....	7,710,315
1902	.....	1,103,793	.....	136,252	646,496	2,027,000	.....	.....	.....	.....	.....	.....	.....	14,356,910
1903	.....	2,305,613	.....	131,125	682,185	793,765	.....	.....	.....	.....	.....	.....	3,670	24,334,481
1904	.....	2,224,550	.....	120,506	650,779	1,241,304	.....	.....	.....	.....	.....	.....	39,392	29,548,634
1905	.....	2,118,312	.....	96,871	476,898	2,226,768	.....	.....	.....	.....	.....	.....	29,650	34,298,041
1906	.....	2,434,512	.....	72,810	404,379	2,675,650	.....	.....	.....	.....	.....	.....	10,000	32,623,229
1907	.....	3,294,206	.....	69,060	435,584	3,372,465	.....	.....	.....	.....	.....	.....	69,090	40,102,512
1908	.....	4,273,314	.....	67,862	498,015	5,138,959	.....	.....	.....	.....	.....	.....	125,475	48,306,737
1909	.....	5,157,252	.....	66,338	516,628	4,350,898	.....	.....	.....	.....	.....	.....	126,775	58,191,723
1910	.....	6,281,221	.....	74,725	652,575	3,729,618	.....	.....	.....	.....	.....	.....	58,970	77,697,568
1911	.....	7,081,165	.....	71,255	661,785	3,223,661	.....	.....	.....	.....	.....	.....	51,350	83,744,044
1912	.....	5,813,037	.....	65,715	859,885	3,073,427	.....	.....	.....	.....	.....	.....	45,870	90,074,439
1913	.....	6,189,561	.....	62,406	1,022,052	2,898,846	.....	.....	.....	.....	.....	.....	27,375	97,867,184
1914	.....	6,495,100	.....	55,743	968,421	2,504,475	.....	.....	.....	.....	.....	.....	27,375	103,623,695
1915	.....	5,661,878	.....	53,000	1,036,305	2,110,133	.....	.....	.....	.....	.....	.....	27,375	89,566,779
1916	.....	5,076,306	.....	56,775	1,122,033	1,721,453	.....	.....	.....	.....	.....	.....	27,450	91,822,362
1917	.....	4,750,582	.....	56,570	1,186,407	1,501,799	.....	.....	.....	.....	.....	.....	27,375	97,267,832
1918	.....	4,403,281	.....	54,613	1,386,518	1,397,781	.....	.....	.....	.....	.....	.....	27,375	101,637,870
1919	.....	4,350,084	.....	53,680	1,792,465	1,341,415	.....	.....	.....	.....	.....	.....	27,375	101,221,784
1920	38,116	5,391,497	.....	54,910	2,122,449	1,311,264	.....	.....	.....	.....	.....	.....	25,610	105,721,186
1921	2,518,812	6,012,839	75,588	54,155	2,375,479	1,344,926	.....	.....	.....	.....	.....	.....	24,035	114,849,924
1922	11,169,383	4,512,974	18,560,595	48,339	3,015,877	1,258,287	190,785	.....	.....	.....	.....	.....	20,338	139,626,876
1923	34,355,642	4,064,661	68,810,361	52,862	3,702,404	1,192,036	3,128,694	128,674	157,698	.....	.....	.....	21,058	263,728,895
1924	17,547,916	4,115,144	60,119,659	53,240	4,049,533	907,418	17,517,908	345,427	6,813,489	623,847	10,405	3,100	21,006†	230,366,303
1925	15,861,954	4,490,298	40,116,683	48,213	9,003,751	630,813	13,298,212	346,364	13,449,723	7,391,456	19,029,724	.....	52,841‡	231,568,982
1926	19,064,814	6,987,489	37,931,964	46,865	16,999,876*	675,950	10,354,905	371,981	7,801,586	6,114,430	17,390,131	587,107	53,963¶	224,117,013
Totals	100,556,637	116,142,026	225,614,750	2,639,559	65,645,869	60,850,962	44,490,504	1,192,445	28,222,496	14,129,733	36,430,278	590,207	1,259,294	2,553,189,447

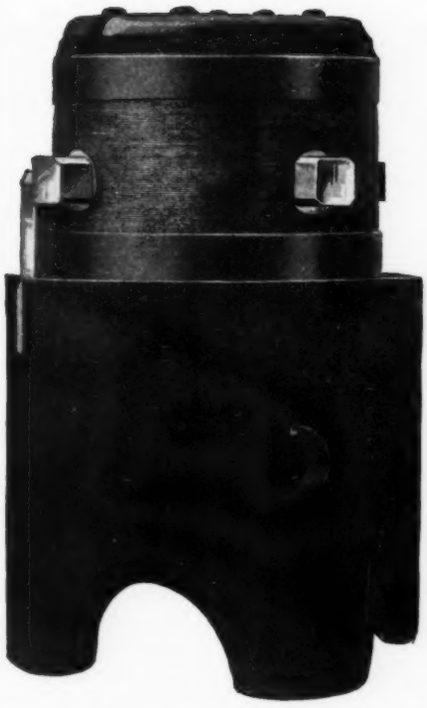
*Includes Ventura Avenue, 14,795,495 barrels; Ventura-Newhall 2,204,381 barrels. †Watsonville. ‡Watsonville and Newport. ¶Watsonville and Newport.

The **LARKIN** Improved **SAND PUMP**

(Patented)

Manufactured at Butler, Penna.

Furnished with either or both of these bottoms



LARKIN REGULAR BOTTOM

LARKIN BIT BOTTOM

—is giving satisfaction everywhere

The LARKIN Improved Sand Pump is flexible, in that it operates success fully at all depths—under all conditions. Under normal conditions this Pump will, when equipped with its REGULAR Bottom, bring out the sand and sediment in record time.

Where cavings have packed hard, the Larkin Bit Bottom may be used. It will break up the hard formations efficiently, and so quickly pass the material through to the pump, that the pump may be operated at full capacity without being delayed to any extent, even by the worst conditions encountered. If you want to be prepared to meet the toughest pumping jobs with the best pump, get the Larkin and have it equipped with either the Regular or Bit Bottoms.

The LARKIN Improved Sand Pump will clean out more wells, for more years, than any sand pump made. Its Barrel is of "NATIONAL" Seamless Steel Tubing. In every detail of construction, the materials used are unexcelled for quality.

There is no better equipment than this Larkin Leader. It has been made at Butler Penna., for years. It is still made there and there only. Even more today than when the Eastern fields were young, it is the leading sand pump on the market.

Write for Circular and Price List

LARKIN & CO., Butler, Penna.

Texas Production by Fields by Years, 1896-1926

(Figures in Thousands of Barrels of 42 U. S. Gallons)

NORTH TEXAS — **WEST TEXAS**

Year	Burkburnett	Electra	Iowa Park K.M.A.	Petrolia-Clay County	Baylor County	Montague-Cook Counties	Wichita-Wilbarger Counties	Archer County-Holliday	Total	Brown County	Callahan County	Coleman County	Crane-Upton Counties	Crockett County
1896	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1897	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1898	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1899	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1900	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1901	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1902	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1903	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1904	....	....	....	65	....	....	....	....	65	....	....	....	....	....
1905	....	....	....	102	....	....	....	....	102	....	....	....	....	....
1906	....	....	....	111	....	....	....	....	111	....	....	....	....	....
1907	....	....	....	83	....	....	....	....	83	....	....	....	....	....
1908	....	....	....	82	....	....	....	....	82	....	....	....	....	....
1909	....	....	....	114	....	....	....	....	114	....	....	....	....	....
1910	....	....	....	127	....	....	....	....	127	....	....	....	....	....
1911	....	a	....	169	....	....	900	....	1,069	....	....	....	....	....
1912	....	a	....	197	....	....	4,227	....	4,424	....	....	....	....	....
1913	a	a	a	345	....	....	8,132	....	8,477	....	....	....	....	....
1914	a	a	a	551	....	....	8,228	....	8,779	....	....	....	....	....
1915	a	a	a	349	....	....	5,883	....	6,232	....	....	....	....	....
1916	a	a	a	303	....	....	7,837	a	8,140	....	....	....	....	....
1917	a	a	a	282	....	....	9,542	a	9,824	6	....	....	....	....
1918	a	a	a	297	....	....	12,159	a	12,456	451	....	31	....	....
1919	20,918	4,461	178	213	....	....	b	58	25,828	213	....	47	....	....
1920	29,890	3,681	1,311	135	....	....	b	50	35,067	115	d	84	....	....
1921	18,562	4,206	1,417	132	....	....	b	422	24,738	122	d	66	....	....
1922	11,487	6,606	937	121	....	....	b	850	20,001	225	d	35	....	....
1933	9,174	8,856	793	164	....	....	....	5,089	24,076	223	d	48	....	....
1924	7,109	7,333	1,339	119	....	....	c271	10,869	27,040	194	91	45	....	....
1925	5,207	6,294	1,300	148	44	111	c3,190	13,578	29,872	760	1,285	60	....	3
1926	4,581	5,693	1,692	149	....	912	c4,975	11,722	29,724	1,628	1,468	90	1,996	d
Totals	106,928	47,130	8,967	4,358	44	1,023	65,344	42,638	276,432	3,937	2,844	506	1,996	3

a—Included under Wichita-Wilbarger Counties. b—See Burburnett and Electra. c—Includes South Vernon. d—Included in West Texas "Others."

PANHANDLE DISTRICT

	1924	1925	1926
All Sections	207	1,240	.....
Hutchinson County	....	....	24,000
Others	....	....	751
Totals	207	1,240	24,751
Grand Total			26,198

WEST TEXAS—Continued.

Year	Desdemona	Eastland County	Howard County	Jack County	Jones County	Mitchell-Scurry Counties	Strawn-Palo Pinto County	Reagan County	Moran-Shackelford County	Stephens County	Throckmorton County	Young County	Others	Total
1896	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1897	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1898	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1899	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1900	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1901	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1902	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1903	....	....	....	....	....	....	....	....	....	....	....	....	....	....
1914	....	....	....	....	....	....	....	....	68	....	....	....	....	68
1915	....	....	....	....	....	....	50	....	109	....	....	....	....	159
1916	....	....	....	....	....	....	175	....	136	....	....	....	....	311
1917	....	93	....	....	....	....	341	....	68	36	....	....	....	544
1918	....	3,107	....	....	....	....	186	....	55	790	....	....	....	4,620
1919	7,376	22,380	....	....	....	....	101	....	33	10,514	....	....	....	40,664
1920	5,098	10,141	....	....	....	....	512	....	49	23,852	....	135	3	39,989
1921	2,467	5,887	....	....	....	....	262	....	50	31,038	....	2,820	5	42,717
1922	3,489	4,787	....	....	....	34	602	....	309	14,925	....	3,723	10	28,139
1923	2,762	3,764	....	16	....	166	403	....	1,426	10,062	....	2,351	14	21,235
1924	2,573	2,627	....	11	....	469	323	1,079	1,268	7,129	....	598	11	16,418
1925	e	3,711	....	9	....	818	228	8,982	1,085	5,729	44	3,432	12	26,158
1926	702	2,133	34	f	45	288	159	11,243	2,602	4,414	65	2,767	3,265	32,899
Totals	24,467	58,630	34	36	45	1,775	3,342	21,304	7,258	108,489	109	15,826	3,320	253,921

e—Desdemona included with Eastland County. f—Jack County included in West Texas "Others."

SOUTHWEST TEXAS

Year	Luling	Lytton Springs	Somerset	Laredo District	Piedras Pintas	Thrall	Rockdale-Minerva	Misc.	Total
1915	....	....	....	....	....	613	....	181	794
1916	....	....	....	....	....	433	....	123	556
1917	....	....	....	....	....	177	....	65	242
1918	....	....	....	....	....	137	....	158	195
1919	....	....	94	....	....	8	....	48	150
1920	....	....	245	....	....	8	....	60	313
1921	....	....	482	....	....	73	....	51	1,914
1922	....	....	955	766	....	51	94	48	606
1923	958	....	1,335	1,592	....	34	230	35	4,184
1924	10,210	....	1,023	1,965	....	25	a	218	13,441
1925	9,706	2,571	1,116	3,488	....	17	a	289	17,187
1926	7,832	1,955	789	4,346	a	a	a	316	15,238
Total	28,706	4,526	6,039	12,157	....	1,576	324	1,492	54,820

a—Included under Miscellaneous.

(*Continued on page* 134)

GROUND PINS *and* BUSHINGS

Have you ever thought of the advantages of them for oil well chain?

They're here on Deep Well Chabelco

Ground pins and bushings, providing the utmost in smooth wearing surfaces, naturally suggested themselves as the next advance for oil well chain.

For the past four years the Chain Belt Company has been working on the new oil well chains, Rex Deep Well Chabelco—1030-DW3 and 1240-DW4. More than a quarter of a million dollars has been spent in development and tooling up to produce them.

Today they are stocked in the Oil Fields, with ground pins and bushings, as a part of the many new improvements on these superior chains for rotary drilling rigs.

The pins of forged steel are ground smooth by centerless grinding. The bushings are drawn, seamless tubing, accurately cut to size and ground. The ground pins working in the seamless bushings naturally bring together two very smooth surfaces. The natural action of the chain is freer, friction is reduced, uniform high strength and wearing qualities are increased.

Deep Well Chabelco now offers:

1. A chain that will have long life.
2. A chain that will not rattle apart.
3. A chain in which the sidebars will not back off the bushings.
4. A chain that will not rapidly stretch.
5. A chain that is flexible and smooth riding.
6. A chain that is easy of assembly in the field.
7. A chain that will not suddenly give way while the tools are in the hole.

Rex Deep Well Chabelco 1030-DW3 is an A. P. I. 3 Chain.

Rex Deep Well Chabelco 1240-DW4 is an A. P. I. 4 Chain.

The tensile strength of DW3 is 45,000 pounds.

The tensile strength of DW4 is 90,000 pounds.

Stocked at Oil Field Supply stores—or write.

GET GENUINE 1030-DW3 AND 1240-DW4

REX Deep Well CHABELCO

CHAIN BELT COMPANY

1000 Keystone Building, *Houston, Texas*
739 Park Street *Milwaukee, Wis.*
210 So. San Pedro Street, *Los Angeles, Calif.*

Texas Production by Fields by Years, 1896-1926

(*Continued from page* 132)

EAST CENTRAL TEXAS
(Figures in Thousands of Barrels of 42 U. S. Gallons)

TEXAS GULF COAST
(Figures in Thousands of Barrels of 42 U. S. Gallons)

Year	Mexia-Currie-Richland	Wortham	Corsicana	Powell	Corsicana-Powell	Nigger Creek	Marion County	Total	Batson	Big Creek	Barbers Hill	Boling	Blue Ridge	Damon Mound
1896	....	....	2	....	....	....	....	2	....	....	....	....	....	....
1897	....	....	66	....	....	....	....	66	....	....	....	....	....	....
1898	....	....	545	....	....	....	....	545	....	....	....	....	....	....
1899	....	....	668	....	....	....	....	668	....	....	....	....	....	....
1900	....	....	830	5	....	....	....	835	....	....	....	....	....	....
1901	....	....	763	37	....	....	....	801	....	....	....	....	....	....
1902	....	....	402	100	....	....	....	502	....	....	....	....	....	....
1903	....	....	571	47	....	....	....	618	5	....	....	....	....	....
1904	....	....	374	129	....	....	....	503	10,905	....	....	....	....	....
1905	....	....	313	131	....	....	....	444	3,791	....	....	....	....	....
1906	....	....	336	676	....	....	....	1,012	2,388	....	....	....	....	....
1907	....	....	276	597	....	....	....	873	2,167	....	....	....	....	....
1908	....	....	211	399	....	....	....	610	1,594	....	....	....	....	....
1909	....	....	181	383	....	....	....	564	1,206	....	....	....	....	....
1910	....	....	137	450	....	....	252	839	1,113	....	....	....	....	....
1911	....	....	129	373	....	....	678	1,180	1,023	....	....	....	....	....
1912	....	....	233	251	....	....	363	847	845	....	....	....	....	....
1913	....	....	159	283	....	....	262	704	741	....	....	....	....	....
1914	....	....	134	282	....	....	181	597	776	....	....	....	....	....
1915	....	....	143	237	....	....	123	503	704	....	....	....	....	....
1916	....	....	135	216	....	....	65	416	745	....	....	....	....	....
1917	....	....	132	197	....	....	58	387	692	....	....	....	....	....
1918	....	....	g	g	362	....	....	362	655	....	20	....	h	487
1919	....	....	g	g	150	....	....	150	502	....	169	....	25	435
1920	....	....	g	g	530	....	....	530	484	....	136	....	173	1,259
1921	4,717	....	g	g	305	....	....	5,022	516	....	50	....	461	1,354
1922	35,120	....	g	g	246	....	....	35,366	430	....	236	....	416	945
1923	20,085	....	g	g	32,361	....	....	52,446	392	17	173	....	332	822
1924	15,615	....	g	g	33,501	....	....	49,116	542	299	72	....	318	545
1925	9,607	16,838	g	g	17,528	....	....	43,973	546	329	47	10	303	419
1926	5,558	3,250	g	g	10,562	1,791	....	21,161	481	523	146	1,121	483	344
Totals	90,702	20,088	6,740	4,793	95,545	1,791	1,982	221,641	33,243	1,168	1,049	1,131	2,511	6,610

g—Corsicana and Powell combined. h—Blue Ridge included in Coastal "Others".

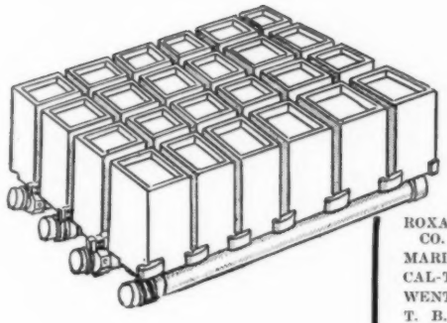
TEXAS GULF COAST—Continued
(Thousands of Barrels of 42 U. S. Gallons)

Year	Dayton	Goose Creek	Hull	Humble	Matagorda County	Orange	Pierce Junction	Saratoga	Sour Lake	Spindle Top	South Liberty	West Columbia	Others	Total	Texas Total
1896	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2
1897	....	....	....	....	....	....	....	....	....	....	....	....	....	....	66
1898	....	....	....	....	....	....	....	....	....	....	....	....	....	....	545
1899	....	....	....	....	....	....	....	....	....	....	....	....	....	....	668
1900	....	....	....	....	....	....	....	....	....	....	....	....	....	....	835
1901	....	....	....	....	....	....	....	....	....	3,593	....	....	....	3,593	4,393
1902	....	....	....	....	....	....	....	....	44	17,421	....	....	....	17,465	17,967
1903	....	....	....	....	....	....	....	....	8,848	8,601	....	....	....	17,454	18,072
1904	....	....	....	....	152	....	....	739	6,442	3,435	....	....	....	21,673	22,241
1905	60	....	....	18,066	46	....	....	2,922	3,369	1,600	....	....	....	29,854	30,400
1906	192	....	....	3,571	8	....	....	2,289	2,156	1,076	....	....	....	11,680	12,803
1907	120	....	....	2,931	4	....	....	2,199	2,355	1,613	....	....	....	11,389	12,345
1908	40	....	....	3,778	63	....	....	1,635	1,595	1,747	....	....	31	10,483	11,175
1909	18	....	....	3,237	29	....	....	1,184	1,704	1,388	....	....	87	8,853	9,531
1910	10	....	....	2,495	456	....	....	1,024	1,519	1,182	....	....	129	7,928	8,894
1911	4	....	....	2,426	562	....	....	926	1,365	966	....	....	2	7,274	9,523
1912	12	44	....	1,830	300	....	....	1,117	1,175	823	....	....	1	6,147	11,418
1913	13	250	....	1,505	295	18	....	938	1,348	716	....	....	2	5,826	15,007
1914	19	135	....	2,799	164	43	....	890	5,209	580	....	....	2	10,617	20,061
1915	10	119	....	11,062	137	22	....	864	4,115	388	....	....	47	17,468	25,156
1916	9	397	....	10,926	158	18	....	781	4,923	340	....	....	44	18,341	27,764
1917	10	7,300	....	7,390	128	7	....	683	4,763	308	....	....	159	21,440	32,437
1918	7	9,419	330	5,645	100	3	....	791	3,115	502	....	136	40	21,250	38,883
1919	1	7,288	1,476	3,271	53	4	....	616	2,740	459	....	8,129	24	25,192	91,984
1920	1	5,666	4,469	3,692	76	4	....	914	2,073	324	....	10,563	5	29,839	105,738
1921	30	5,647	8,718	3,098	89	705	1,404	937	1,750	321	....	12,573	3	37,656	112,048
1922	39	5,248	6,819	2,553	35	5,492	1,145	662	1,738	295	....	11,632	....	37,685	121,797
1923	75	6,251	7,732	2,449	39	5,312	333	701	2,092	309	....	6,599	....	33,628	135,569
1924	27	4,020	7,287	2,245	73	4,182	163	545	1,650	365	....	4,964	....	27,297	133,519
1925	6	3,661	7,184	1,752	34	5,024	292	587	1,585	429	4,551	4,230	....	30,989	149,419
1926	h	3,281	6,662	1,545	45	3,746	907	455	1,815	13,370	2,117	3,330	714	41,085	164,858
Total	703	58,726	50,677	98,266	3,046	24,580	4,244	24,399	69,488	62,151	6,668	62,156	1,290	512,106	1,345,118

h—Dayton included with Coastal "Others."

Performance counts

a record of *one year and a half!*



Some of our satisfied users.

CARTER OIL CO.
COMAR OIL CO.
GLOBE GASOLINE CO.
ROXANA PETROLEUM CO.
MARLAND OIL CO.
CAL-TEX GASLOINE CO.
WENTZ OIL CORP.
T. B. SLICK OIL CO.
TEXAS COMPANY
C. G. TIBBENS
LEWIS OIL CO.
J. A. HULL CO.
PURE OIL COMPANY
AMERICAN PRODUCING & REFINING CO.
TWIN STATES OIL CO.
WOLVERINE PET. CO.
HUMBLE OIL & REFINING CO.
STANDARD OIL CO. OF CALIFORNIA
UNION OIL CO. OF CALIFORNIA
PHILLIPS PETROLEUM CO.
MID-CONTINENT PET. CO.
TRANSCONTINENTAL OIL CO.
SKELLY OIL CO.
SUN OIL COMPANY
ATLANTIC PRODUCING & REFINING CO.
RED BANK OIL CO.
BARNSDALL REFINERIES, INC.
GYPSY OIL CO.
REITER-FOSTER OIL CO.
VICTOR GASOLINE CO.
DEVONIAN OIL CO.
NOBLE OIL & GAS CO.
OKLAHOMA PIPE LINE CO.
OHIO-OSAGE OIL CO.
BROTHERS OIL CO.
WATCHORNE OIL CO.
SHAFFER OIL CO.
OLEAN PETROLEUM CORP.
J. K. HUGHES DEV. CO.
MANHATTAN OIL CO.
HAYS DEVELOPMENT CO.
ROMARTI GASOLINE CO.
MAJOR GASOLINE CO.
OSAGE-ALLEGHANY OIL CO.
DIXON CREEK OIL CO.

LOW PRESSURE PERFECTO GAS BURNER

LESS than eighteen months ago, hardly more than an idea. Today in use by the Leading Oil Companies.

Such is the unparalleled acceptance of the Perfecto Low Pressure Gas Burner throughout the Industry. A sales achievement built on performance alone. In practically every instance, a trial use of the Perfecto was the means of its introduction and general acceptance.

First, a trial under the hardest field conditions against every test for performance and then, repeat order after repeat order. The way the fame of the heat-producing blue flame found only in the Perfecto has spread.

Generating steam pressure of 150 to 175 lbs. on gas pressure of only 2 to 10 lbs. the Perfecto not only secures the heat but applies it to the right place.

Made up in single units, the great success of the Perfecto is due to the thorough mixing of air and gas, before combustion takes place. The combustion goes on in the fire box; no trouble from gas burning in flues, which is the cause of many boilers being ruined. No delicate adjustments; there is nothing to get out of order.

We will be glad to arrange a demonstration. Once you see the Perfecto Low Pressure Gas Burner in operation, you will use no other. Address all correspondence to the home office, Winfield, Kansas.

Perfecto is patented in the U. S. A. and patents are pending in India and Canada. Made and sold by

THE P. J. SONNER GAS BURNER COMPANY

WINFIELD, KANSAS

Sales and Service at

Tulsa, Okla. Shawnee, Okla. Los Angeles, Calif. Pampa, Texas Borger, Texas Ereckenridge, Texas

Louisiana Production by Fields by Years, 1905-1926

(Thousands of Barrels of 42 U. S. Gallons)

Figures taken from Mineral Resources of the United States published by the Department of Commerce

	GULF COAST (Salt Dome Fields)								NORTHERN											
Year	Anse La Butte	Edgerly	Jennings	Lockport	Vinton	Welsh	Other	Total	Bellevue	Caddo	Cotton Valley	De Soto	Elm Grove	Haynesville	Homer	Red River (Bull Bayou Critchton)	Urania	Other	Total	Total State	Year
1905	9	....	8,891	....	....	10	....	8,910	....	....	....	....	....	....	....	....	....	....	....	8,910	1905
1906	25	....	9,025	....	....	23	....	9,073	....	3	....	....	....	....	....	....	....	....	3	9,076	1906
1907	60	....	4,842	....	....	47	....	4,949	....	50	....	....	....	....	....	....	....	....	50	4,999	1907
1908	145	....	5,111	....	....	31	....	5,287	....	499	....	....	....	....	....	....	....	....	499	5,786	1908
1909	37	....	1,966	....	....	26	....	1,929	....	1,028	....	....	....	....	....	....	....	....	1,028	2,957	1909
1910	44	....	1,625	....	26	54	....	1,749	....	5,090	....	....	....	....	....	....	....	....	5,090	6,839	1910
1911	62	....	1,180	....	2,454	27	....	3,723	....	6,995	....	....	....	....	....	....	....	....	6,995	10,718	1911
1912	25	....	1,105	....	932	22	....	2,085	....	7,177	....	....	....	....	....	....	....	....	7,177	9,261	1912
1913	6	....	790	....	1,888	31	....	2,715	....	9,781	....	....	....	....	....	....	....	....	9,781	12,496	1913
1914	18	586	412	....	1,465	18	....	2,499	....	7,572	....	3,834†	....	....	....	401	....	....	....	14,306	1914
1915	21	1,403	435	....	1,234	....	17	3,110	....	6,472	....	1,797	....	....	....	6,802	....	11	15,082	18,192	1915
1916	13	1,252	517	....	1,540	....	4	3,426	....	5,464	....	1,657	....	....	....	4,691	....	10	11,822	15,248	1916
1917	5	806	399	....	1,595	....	25	2,830	....	5,483	....	1,371	....	....	....	1,665	....	43	8,562	11,392	1917
1918	3‡	512	369	....	1,839	....	15	2,738	....	11,144	....	1,066	....	....	....	1,046	....	49	13,305	16,043	1918
1919	....	361	347	....	1,592	....	9	2,309	....	8,700‡	....	1,200‡	....	....	2,000‡	2,900‡	....	79	14,879	17,188	1919
1920	....	379	232	....	1,333	....	3	1,947	....	6,336	....	....¶	....	....	21,508	5,923¶	....	....	33,767	35,714	1920
1921	47	250	254	....	1,379	....	....	1,930	....	5,342	....	719	....	3,161	13,030	2,844	....	77	25,173	27,103	1921
1922	36	125	191	....	1,395	....	....	1,747	1,050	4,498	....	531	160	19,939	5,673	1,778	....	....	33,629	35,376	1922
1923	18	157	204	....	2,071	....	....	2,450	2,351	4,178	....	429	220	10,496	3,581	1,207	....	7	22,469	24,919	1923
1924	12	166	213	128	1,968	....	....	2,487	1,749	4,319	1,211	353	217	6,720	2,837	1,231	....	....	18,637	21,124	1924
1925*	8	194	349	477	2,535	....	....	3,563	1,191	4,173	3,520	....¶	244	4,739	2,400	1,526	18	....	17,811	21,374	1925
1926*	§	336	419	1,348	2,344	....	9	4,456	816	4,598	2,896	....¶	209	3,609	1,916	1,437	2,535	66	18,082	22,538	1926
Total	594	6,527	38,876	1,953	27,590	289	82	74,912	7,157	108,902	7,627	12,957	1,050	48,664	52,945	33,451	2,553	342	263,841	338,753	Total

*—Figures taken from weekly estimates as published in The OIL WEEKLY and issued by the American Petroleum Institute.
†—Includes Sabine.
‡—Estimated.
¶—De Soto included with Red River.
§—Included in others.

Wyoming Production by Districts by Years, 1894-1926

(Thousands of Barrels of 42 U. S. Gallons)

Figures from Mineral Resources published by the Department of Commerce.

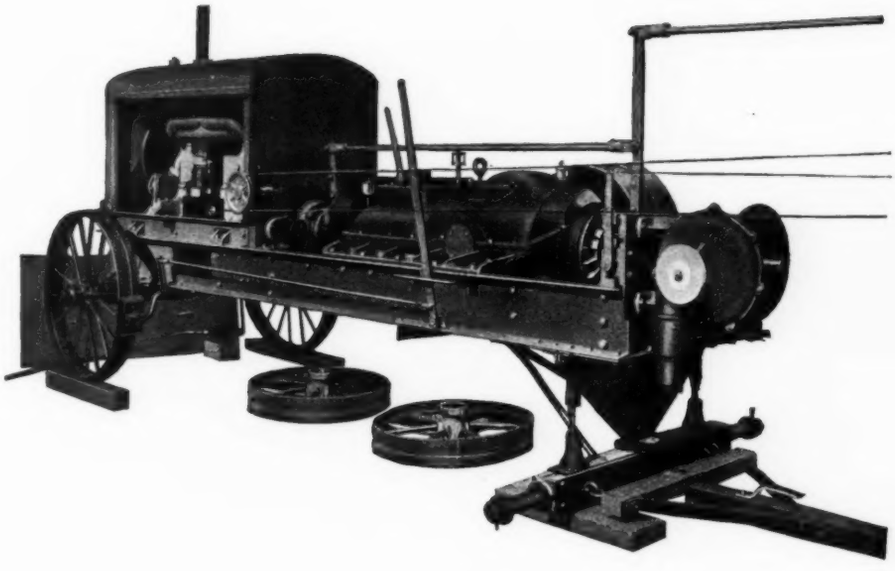
Year	Big Muddy	Byron Greybull Torchlight	Elk Basin	Ferris	Grass Creek	Hamilton Dome Worm Springs	Lance Creek	Lander-Dallas Derby Dome	Lost Soldier	Mule Creek	Notches	Osage	Pilot Butte	Poison Spider So. Casper	Rex Lake	Rock Creek	Salt Creek	Teapot	Other	Total
1894-1913	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4,389
1914	....	96	....	....	....	....	....	27	....	....	....	....	....	....	....	....	3,421	....	16	3,560
1915	†	141	....	....	99	....	....	28	....	....	....	....	....	....	....	....	3,971	....	7	4,246
1916	†	140	721	....	1,370	....	....	63‡	....	....	....	....	‡	....	....	....	3,933	....	7	6,234
1917	665	62	1,530	....	2,756	....	....	50‡	....	....	....	....	‡	....	....	....	3,911	....	4	8,978
1918	3,082	45	1,067	....	2,951	....	....	48	....	....	....	....	62	....	....	....	5,337	....	4	12,596
1919	3,104	27	740	¶	2,049	....	461	62	167¶	....	....	....	91	....	....	242	6,225	....	4	13,172
1920	2,083	69	732	¶	1,573	57	353	84	135¶	182	....	16	69	....	....	1,370	10,090	....	18	16,831
1921	1,927	90	681	¶	1,435	67	346	119	524¶	68	....	176	46	....	....	1,681	12,172	....	11	19,333
1922	1,506	70	652	¶	1,784	111	282	149	251¶	168	....	182	38	....	....	1,728	19,248	37	9	26,715
1923	1,527	57	634	¶	1,589	216	363	137	1,551¶	....	61	178	29	†	....	1,429	35,770	1,156	87	44,785
1924	1,272	33	409	42	1,113	239	786	133	1,733	178	39	146	29	229	41	1,181	30,874	1,004	17	39,498
1925*	1,119	47	313	35	1,224	207	316	104	1,708	111	21	138	19	228	16	1,134	21,349	642	89	28,820
1926*	1,882	†	267	†	1,085	†	85	†	1,774	†	†	†	†	†	†	1,032	18,165	445	1,563	26,298
Total	18,167	867	7,796	77	19,028	897	2,992	1,004	8,343	707	121	836	383	457	57	9,797	174,466	3,284	1,834	255,455

1894 All Sections 2
1895 " " 3
1896 " " 3
1897 " " 4
1898 " " 5
1899 " " 6
1900 " " 5
1901 " " 5
1902 " " 6
1903 " " 9
1904 All Sections 12
1905 " " 8
1906 " " ..... †7
1907 " " ..... ‡9
1908 " " 18
1909 " " ..... ‡20
1910 " " ..... ‡115
1911 " " 1572
1912 " " 1572
1913 " " 2406

†Estimated. ‡Includes Utah.

*Taken from weekly estimates of the A. P. I. as published in The OIL WEEKLY. †Included under other. ‡Pilot Butte included with Lander Dallas. ¶Ferris included with Lost Soldier.

Easily Moved, Quickly Set Up



You Fellows Who Know What Cost Means, Write Us For Catalog on Young Mounted Drilling Engines!

Give us an opportunity to prove to you, by the very simplicity, adaptability, portability and actual economy of operation that the Young Mounted Drilling Engine IS an improvement over anything else in the field.

Let us show you WHY the Young Mounted Drilling Engine is peculiarly adapted to the use of the wildcatter. A postal card request will bring our Catalog O-3, price list, and full facts regarding this remarkable machine.

Write for that catalog today! The pleasure will be ours, and you will be under no obligation.

THE YOUNG ENGINE CORP.

Canton, Ohio

Formerly The W. T. Young Engine Company
Oil City, Pa.

Also builders of Gas and Air Compressors, Gas Booster Units and Vacuum Pumps, that are semi-automatic and designed with the view of furnishing a machine at low first cost, one economical on fuel and oil, easily installed and requiring only a small building to house it. See Catalogue O-6.

Arkansas Production by Fields by Years 1921-1926

(Thousands of Barrels of 42 U. S. Gallons)
Figures taken from Mineral Resources published by the Department of Commerce.

Year	El Dorado	Smackover	Irma-Nevada	Stephens	Lisbon	Others	Total
1921	10,473	....	....	....	....	....	10,473
1922	10,592	2,107	....	13	....	....	12,712
1923	5,830	30,048	†	732†	....	....	36,610
1924	4,760	40,000	450	818	....	....	46,028
1925*	3,198	74,383	514	621	....	....	78,716
1926*	2,660	52,771	781	598	2,241	4	59,055
Totals	37,513	199,309	1,745	2,782	2,241	4	243,594

†Irma included with Stephens.

MONTANA PRODUCTION BY DISTRICTS BY YEARS, 1916-1926

(Thousands of Barrels of 42 U. S. Gallons)
Figures from Mineral Resources published by the Department of Commerce.

Year	Cat Creek	Elk Basin	Kevin-Sunburst	Other	Total
1916	....	45	....	....	45
1917	....	100	....	....	100
1918	....	69	....	....	69
1919	....	90	....	....	90
1920	243	97	....	....	340
1921	1,408	75	....	26	1,509
1922	2,333	46	36	34	2,449
1923	2,227	28	523	4	2,782
1924	1,572	24	1,217	2	2,815
1926*	1,027	†	6,598	79	7,704
1925*	1,202	†	2,589	56	3,847
Total	10,012	574	10,963	201	21,750

*Figures taken from weekly estimates of the A P. I. and published in The OIL WEEKLY.

COLORADO PRODUCTION BY DISTRICTS BY YEARS, 1887-1926

(Thousands of Barrels of 42 U. S. Gallons)
Figures from Mineral Resources published by the Department of Commerce.

	Year	Boulder	Florence	Fort Collins	Moffat	Others	Total
All Sections	1887	....	....	....	....	....	76
	1888	....	....	....	....	....	297
	1889	....	....	....	....	....	316
	1890	....	....	....	....	....	368
	1891	....	....	....	....	....	665
	1892	....	....	....	....	....	824
	1893	....	....	....	....	....	594
	1894	....	....	....	....	....	515
	1895	....	....	....	....	....	439
	1896	....	....	....	....	....	361
	1897	....	....	....	....	....	385
	1898	....	....	....	....	....	444
	1899	....	....	....	....	....	390
	1900	....	....	....	....	....	317
	1901	....	....	....	....	....	461
	1902	....	....	....	....	....	397
	1903	....	....	....	....	....	484
	1904	....	....	....	....	....	502
	1905	11	366	....	....	....	376
	1906	49	279	....	....	....	328
	1907	68	263	....	....	....	331
	1908	84	295	....	....	....	379
	1909	86	225	....	....	....	311
	1910	42	193	....	....	....	235
	1911	37	187	....	....	....	224
	1912	15	190	....	....	....	205
	1913	12	176	....	....	....	188
	1914	7	216	....	....	1	224
	1915	6	202	....	....	....	208
	1916	6	191	....	....	....	197
	1917	6	114	....	....	1	121
	1918	4	135	....	....	4	143
	1919	5	102	....	....	14	121
	1920	7	88	....	....	16	111
	1921	5	83	....	....	20	108
	1922	4	70	....	....	24	97
	1923	4	62	....	....	20†	86
	1924	4	70	86	256	29†	445
	1922	4	70	....	....	23	97
	1925*	5	95	354	551	43‡	1,048
	1926	§	163	1,211	1,201	232¶	2,807
	Total	467	3,765	1,651	2,008	403	8,294

*Figures taken from weekly estimates of the A. P. I. as published in The Oil Weekly. †Rangely. ‡Rangely and Tow Creek. ¶Rangely, Tow Creek and Boulder. §Included in others.

Building Storage for Walden Production

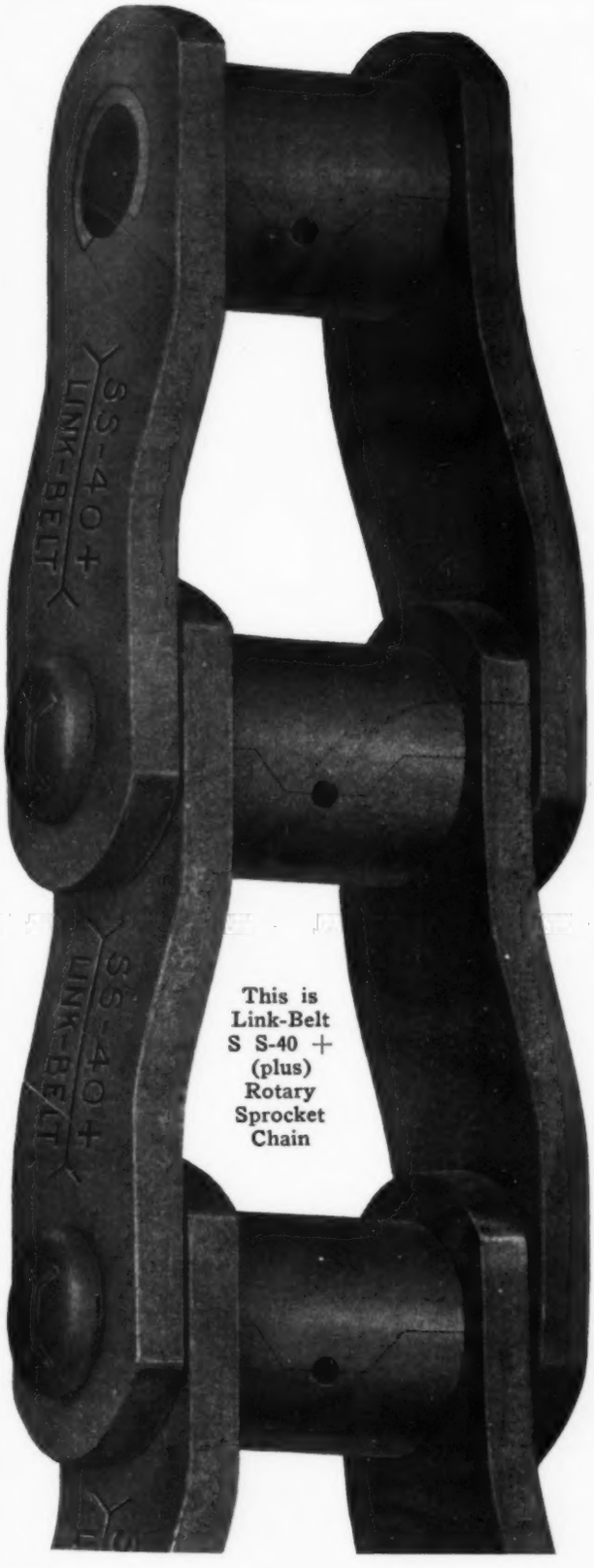
Denver, Colo.—The Continental Oil Company is erecting a 55,000 barrel tank at its Walden discovery well in addition to several small tanks both in the field and at the railroad station. The well is located less than three miles from the nearest railroad point. A small pipe line is being laid from the Walden structure to connect with the rail line. The well is more than 200 feet higher than the railroad point. It will not be necessary to pump the oil through the line. A water supply is being brought to the field from a small river nearby. This is a temporary arrangement, however, unless other structures in the region fail to be productive. It will be possible to gravitate water to the various structures from a larger stream much higher than the Walden field. A true test of the well has not been made, due to the expansion of the gas and the freezing of the oil. The well flowed at the rate of several hundred barrels daily before the separator became clogged with ice.

Little Lost Soldier Has Good Completion

Casper, Wyo.—The Prairie Oil & Gas Company has completed a 1500 barrel well in the Little Lost Soldier field at a depth of 2175 feet. It is the largest producer completed in the field for more than a year, and is located on section 11-26-90. The gas pressure in the field has gradually waned but is not as completely dissipated as at first thought. The Prairie interests practically own this field, which is second in production in the state to the Salt Creek field.

Maverick Springs Well

Casper, Wyo.—The Texas Production Company has completed a 725 barrel producer in the Maverick Springs field. The well was centrally located on section 26-6-101 and will be shut in until a market is found for the oil and pipe line connections are established. Several thousand barrels of production is shut in in the field.



This is Link-Belt S S-40 + (plus) Rotary Sprocket Chain

Your drilling can be made more profitable by using LINK-BELT SS-40 PLUS and SS-124 PLUS Rotary Sprocket Chains

Insist upon chain with the double ⟝ arrow trade mark

2596

LINK-BELT COMPANY

Leading Manufacturers of Elevating, Conveying, and Power Transmission Chains

INDIANAPOLIS, 200 S. Belmont Ave.

LINK-BELT

SS-40+ (Plus) Rotary Chain SS-124+ (Plus)

Say you saw it in The OIL WEEKLY

United States Field Statistics for 1926

Wells Drilled for Oil and Gas in the United States 1859-1926

Figures from the United States Mineral Resources, 1924, Part II.

Year	Wells Completed	Dry Holes	Year	Wells Completed	Dry Holes	Year	Wells Completed	Dry Holes
1859-1907	287,922†	54,940†	1914	23,137	4,142	1921	21,937	5,160
1908	16,909	3,214	1915	14,157	2,981	1922	24,689	5,332
1909	18,327	3,404	1916	24,619	4,039	1923	24,438	5,883
1910	14,940	2,422	1917	23,407	4,851	1924	21,888	5,044
1911	13,768	2,363	1918	25,687	5,613	1925	25,623	6,734
1912	17,180	2,855	1919	29,173	5,986	*1926	28,995	8,242
1913	25,590	4,282	1920	33,911	7,364	Total	716,297	144,851

*Oil Weekly Figures. †From papers on the Conservation of Mineral Resources, U. S. Geological Survey Bulletin 394, 1909 pp 30-50.

Recapitulation

State—	Completions 1926	Completions 1925	Producers 1926	Producers 1925	Gas Wells 1926	Gas Wells 1925	Failures 1926	Failures 1925	Initial Production 1926	Initial Production 1925	Annual Production* 1926	Annual Production* 1925
Arkansas	1,102	1,771	791	1,354	83	108	228	309	74,061	1,384,155	59,056,786	78,717,700
California	979	1,134	869	1,033	8	1	102	100	408,081	615,181	224,117,015	231,768,982
Eastern States	8,498	8,516	5,297	5,165	1,769	1,855	1,432	1,496	82,150	75,467	38,322,330	37,616,700
Kansas	1,851	1,537	1,053	917	45	53	753	567	153,055	188,403	40,302,370	34,497,756
Louisiana	1,130	555	680	298	128	69	322	188	124,229	70,205	24,007,875	21,414,878
Mountain States	1,505	869	851	746	51	20	603	103	315,493	161,442	37,680,885	37,153,875
Oklahoma	5,370	4,479	2,959	2,557	498	412	1,913	1,510	1,049,597	813,348	176,450,580	167,951,575
Texas	8,560	6,545	5,287	4,092	266	126	3,007	2,327	1,670,145	1,332,723	164,858,034	150,010,406
Totals	28,995	25,406	17,787	16,162	2,848	2,644	8,360	6,600	3,876,811	4,640,924	764,795,875	759,131,872

*—Oil Weekly production estimates.

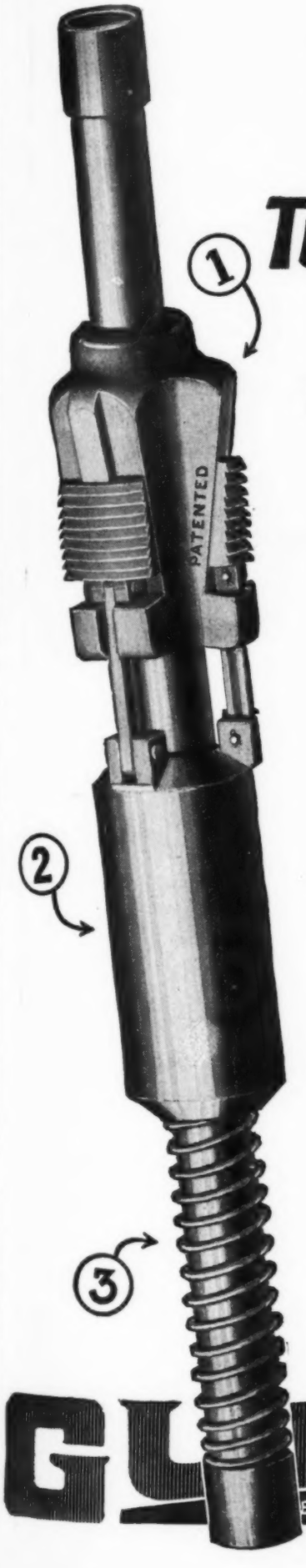
Arkansas

Field—	Completions 1926	Completions 1925	Producers 1926	Producers 1925	Gas Wells 1926	Gas Wells 1925	Failures 1926	Failures 1925	Initial Production 1926	Initial Production 1925	Annual Production 1926	Annual Production 1925
Bradley	9	1	8	1	..	..	1	..	730	12	.....	.....
El Dorado	23	9	7	5	3	..	13	4	320	285	2,660,202	3,198,905
Irma-Nevada	38	17	28	15	4	..	6	2	3,330	1,720	781,442	514,072
Lisbon	397	..	361	..	11	..	25	..	33,836	.....	2,241,305	.....
Smackover	509	1631	352	1323	61	107	95	201	34,101	1,382,003	52,771,227	74,383,376
Stephens	40	11	34	10	3	1	3	..	1,724	135	598,110	621,347
Others	..	..	..	..	..	..	..	..	.....	.....	4,560	.....
Wildcats	86	102	1	..	1	..	84	102	20	.....	.....	.....
Totals	1102	1771	791	1354	83	108	228	309	74,051	1,384,155	59,056,785	78,717,700

California

	Completions 1926	Completions 1925	Producers 1926	Producers 1925	Gas Wells 1926	Gas Wells 1925	Failures 1926	Failures 1925	Initial Production 1926	Initial Production 1925	Annual Production 1926	Annual Production 1925
Athens-Rosecrans	62	190	42	179	1	1	19	10	22,279	132,335	6,114,430	7,391,456
Baldwin Hills-Inglewood	52	195	47	183	..	..	52	12	24,664	204,828	17,390,131	19,029,742
Bandini	..	2	..	..	..	..	..	2	.....	.....	.....	.....
Brea-Richfield	39	26	36	24	..	..	3	2	18,305	13,963	5,574,244	4,258,973
Caruthers	..	1	..	..	..	..	..	1	.....	.....	.....	.....
Cat Canyon	2	1	1	1	..	..	1	..	250	200	.....	.....
Claremont	..	1	..	..	..	..	..	1	.....	.....	.....	.....
Coalinga	..	..	..	..	..	..	..	..	.....	.....	7,295,807	7,811,886
Comanche Point	..	2	..	..	..	..	..	2	.....	.....	.....	.....
Coyote	..	3	..	3	..	..	..	..	.....	740	6,030,619	7,188,569
Culver City	..	1	..	..	..	..	..	1	.....	.....	.....	.....
Cypress	..	1	..	..	..	..	..	1	.....	.....	.....	.....
Domiguez	13	50	13	47	..	..	..	3	4,808	46,952	7,801,586	13,449,723
Elk Hills	10	12	10	10	..	..	..	2	2,365	3,035	12,292,754	11,833,366
El Segundo	1	..	..	..	..	..	1	..	.....	.....	.....	.....
Fair view	2	..	1	..	..	..	1	..	6	.....	.....	.....
Fullerton	..	..	..	..	..	..	..	..	.....	.....	6,987,489	4,490,298
Hawthorne	..	1	..	..	..	..	..	1	.....	.....	.....	.....
Hermosa	..	1	..	..	..	..	..	1	.....	.....	.....	.....
Homer	..	1	..	1	..	..	..	..	.....	15	.....	.....
Hovey Hills	1	7	1	7	..	..	..	..	20	1,295	.....	.....
Huntington Beach	121	69	116	68	1	..	4	1	106,892	16,069	19,064,814	15,861,954
Jacalitos Dome	..	1	..	..	..	..	..	1	.....	.....	.....	.....

(Continued on page 142)



ONLY ONE

Tubing Catcher can give

POSITIVE TUBING PROTECTION

The GUIBERSON AUTOMATIC TUBING CATCHER has *exclusive* features which make it the ONLY catcher that functions positively, every time, in fluid or out, before the tubing has dropped more than three inches.

1—The dovtetail which serves as a track for each slip preserves alignment of teeth in true circle, prevents slips from falling out to catch on casing ends at collars, and prevents any twist on catcher from twisting slips out of place.

2—The striker weight of the Guiberson is sufficiently HEAVY to overcome any resistance occasioned by deposits of mud or paraffin.

3—The extra STRONG SPRING of the Guiberson will not "fatigue", and insures instant functioning within three inches, in or out of fluid.

Prevent loss of tubing—save production loss and labor cost incident to dropped tubing—by equipping every well with the ONLY catcher gives positive protection every minute it is in the well. Patented.

"Better Be Safe Than Sorry"

THE GUIBERSON CORPORATION

Box 1106, Dallas, Texas

CALIFORNIA BRANCH: 1506 Santa Fe Ave., Los Angeles

402 W. First St., TULSA

321 S. Osage St. PONCA CITY

506 Trust Building NEWARK, O.

GUIBERSON

ER BE SAFE BETTER BE SAFE THAN SORRY UIBERSON THAN SORRY

Field—	Completions		Producers		Gas Wells		Failures		Initial Production		Annual Production	
	1926	1925	1926	1925	1926	1925	1926	1925	1926	1925	1926	1925
Kern River	..	8	..	5	..	..	..	3	.....	575	4,358,396	5,951,217
Kern Front	19	..	18	..	..	..	1	..	2,612	.....	.....	.....
Kettleman Hills	..	1	..	..	..	..	..	1	.....	.....	.....	.....
Keystone	..	1	..	..	..	..	..	1	.....	.....	.....	.....
La Habra	..	1	..	1	..	..	..	..	.....	100	.....	.....
La Mirada	..	4	..	1	..	..	..	3	.....	252	.....	.....
Long Beach	305	139	281	136	4	..	20	3	85,410	49,888	37,931,964	40,116,683
Los Angeles	..	1	..	1	..	..	..	..	.....	1,535	675,950	630,813
Lost Hills	..	1	..	1	..	..	..	..	.....	18	1,693,666	1,736,960
McKittrick	1	8	1	6	..	..	..	2	100	915	1,961,028	2,096,736
Midway	117	117	113	107	..	..	4	10	26,677	55,052	33,968,755	37,391,003
Montebello	22	19	21	18	1	..	..	1	3,426	12,793	6,515,493	6,895,949
Monterey	..	3	..	3	..	..	..	..	.....	388	.....	.....
Newport	3	8	2	2	..	..	1	6	70	140	32,973	31,014
Palms	..	1	..	..	..	..	..	1	.....	.....	.....	.....
Piru District	1	..	1	..	..	..	..	..	115	.....	.....	.....
Plaza Del Rey	..	1	..	..	..	..	..	1	.....	.....	.....	.....
Poco Creek	13	..	7	..	..	..	6	..	1,310	.....	.....	.....
Raisin City	..	2	..	..	..	..	..	2	.....	.....	.....	.....
Rideout Heights	9	3	6	1	..	..	3	2	503	88	.....	.....
Rio Bravo	..	1	..	..	..	..	..	1	.....	.....	.....	.....
San Erindo District	..	3	..	..	..	..	..	3	.....	.....	.....	.....
San Luis Obispo	..	1	..	..	..	..	..	1	.....	.....	.....	.....
Santa Barbara	3	8	3	6	..	..	..	2	1,100	1,025	.....	.....
Santa Clara	..	1	..	..	..	..	..	1	.....	.....	.....	.....
Santa Maria	1	..	..	..	..	..	1	..	.....	.....	1,852,356	.....
Santa Fe Springs	13	2	10	2	..	..	3	..	4,239	400	17,446,709	19,090,766
Seal Beach	12	2	6	..	..	..	6	2	10,310	.....	587,107	.....
Signal Hill	..	1	..	1	..	..	..	..	.....	85	.....	.....
Sunset	35	..	33	..	..	..	2	..	8,281	.....	46,865	.....
Summerland	..	..	..	..	..	..	..	..	.....	.....	.....	.....
Torrance-Redondo	52	178	52	175	..	..	..	3	8,253	17,441	10,354,905	13,298,212
Tulare	..	2	..	..	..	..	..	2	.....	.....	.....	.....
Ventura Newhall	..	..	..	..	..	..	..	..	.....	.....	2,204,381	9,003,751
Ventura Avenue	29	36	28	33	..	..	1	3	73,286	53,785	14,795,495	.....
Watsonville	..	..	..	..	..	..	..	..	.....	.....	20,990	.....
Weed Patch	..	1	..	..	..	..	..	1	.....	.....	.....	.....
Wheeler Ridge	6	12	6	8	..	..	..	4	842	882	371,981	346,364
Whittier	..	3	..	3	..	..	..	..	.....	305	746,125	741,090
Wildcats	35	..	14	..	1	..	20	..	1,958	.....	.....	.....
Totals	979	1134	869	1033	8	1	102	100	408,081	615,181	224,117,015	231,768,982

Louisiana

Field—	Completions		Producers		Gas Wells		Failures		Initial Production		Annual Production	
	1926	1925	1926	1925	1926	1925	1926	1925	1926	1925	1926	1925
Anse La Butte	..	..	..	..	..	..	..	..	.....	.....	(a)	7,576
Bellevue	31	24	19	14	4	3	8	7	543	290	816,910	1,191,373
Bull Bayou	..	3	..	2	..	..	..	1	.....	10	(b)	1,562,394
Caddo	259	81	196	60	25	9	38	12	16,453	4,466	4,598,515	4,173,837
Calcasieu Parish	.....	1	..	1	..	..	..	..	.....	1,100	.....	.....
Cotton Valley	35	131	27	117	4	8	4	6	1,757	17,285	2,896,345	3,520,357
Crichton	1	..	1	..	..	..	..	..	40	.....	(b)	.....
De Soto Parish-Red River	3	1	3	1	..	..	..	2	265	110	1,437,055	.....
Eagle Point	1	..	1	..	..	..	..	..	600	.....	.....	.....
Edgerly	10	6	10	3	..	1	..	2	2,045	855	336,215	194,769
Elm Grove	4	13	2	3	2	5	..	5	55	90	209,345	244,011
Jennings-Evangeline	37	30	27	24	..	..	10	6	2,977	4,611	418,720	349,319
Haynesville	1	..	1	..	..	..	..	..	30	.....	3,609,220	4,739,110
Homer	6	1	6	1	..	..	..	..	98	40	1,916,595	2,399,979
Lockport	22	20	16	7	2	..	4	13	30,850	9,470	1,347,740	477,504
Monroe	75	31	..	1	70	26	5	4	.....	36	.....	.....
Naborton Dist.	2	..	1	..	1	..	..	..	25	.....	.....	.....
Sabine Parish	..	1	..	1	..	..	..	..	.....	3	.....	.....
Sarepta-Shongaloo	3	17	..	..	..	16	3	1	.....	.....	.....	.....
Spring Hill	1	3	..	..	1	1	..	2	.....	.....	.....	.....
Starks Dist.	1	..	..	..	..	..	1	..	.....	.....	.....	.....
Urania	398	11	331	9	3	..	64	2	56,115	805	4,002,095	18,670
Vinton	57	70	39	50	1	..	17	20	12,376	27,525	2,343,720	2,535,979
Others	..	..	..	..	..	..	..	..	.....	.....	75,400	.....
Wildcats	183	111	..	4	15	..	168	107	.....	3,509	.....	.....
Totals	1130	555	680	298	128	69	322	188	124,229	70,205	24,007,875	21,414,878

(a) Included in Others. (b) included in De Soto and Red River.

Texas

Field or County—	Completions 1926	Completions 1925	Producers 1926	Producers 1925	Gas Wells 1926	Gas Wells 1925	Failures 1926	Failures 1925	Initial Production 1926	Initial Production 1925	Annual Production 1926	Annual Production 1925
Archer Co.	1385	1505	788	930	..	..	597	575	69,700	90,912	11,722,895	13,578,085
Baylor Co. b	28	28	7	14	..	..	21	14	198	715	.....	44,420
Barbers Hill	6	..	5	..	..	..	1	..	1,610	....	146,312	46,712
Batson	70	58	53	47	..	1	17	10	3,421	11,210	481,657	545,567
Big Creek	14	36	11	10	..	1	3	25	13,600	6,415	523,697	329,096
Big Lake	96	80	83	64	4	..	9	16	50,370	99,853	11,243,225	8,981,545
Blue Ridge	20	10	16	6	..	..	4	4	13,960	10,325	483,355	302,607
Boling	67	2	33	1	..	..	34	1	35,358	10,000	1,121,292	10,500
Brown County, e	729	149	482	105	11	..	236	44	67,153	8,355	1,628,090	762,285
Burkburnett	171	132	102	89	..	..	69	43	7,862	8,637	4,581,192	5,206,550
Callahan County	153	101	86	73	2	..	65	28	6,395	8,820	1,468,177	1,285,215
Clay County	54	36	13	12	1	..	40	24	284	430	149,745	147,680
Coleman County	127	18	26	11	9	..	92	7	3,470	148	90,310	60,199
Cooke County, c	57	..	42	..	..	..	15	..	2,455	....	.....	.....
Corsicana-Powell	10	170	3	138	1	..	6	32	1,560	9,011	10,562,821	17,582,055
Crane-Upton Counties	188	..	180	..	..	..	8	..	55,875	....	1,996,700	.....
Crockett County, b	31	1	26	1	1	..	4	..	3,680	25	.....	3,320
Currie	2	9	1	3	..	..	1	6	90	1,880	334,520	481,975
Damon Mound	..	..	..	..	..	..	..	..	....	....	344,552	419,011
Eastland County	210	164	60	96	29	..	121	68	3,588	5,054	2,836,084	3,710,990
Electra	375	380	229	249	..	..	146	131	7,933	10,509	5,693,005	6,294,455
Goose Creek	64	79	45	61	..	3	19	15	8,357	14,732	3,281,670	3,661,098
High Island	12	11	2	4	..	..	10	7	45	2,300	58,420	148,256
Howard County	21	..	18	..	..	..	3	..	1,270	....	34,100	.....
Hull	143	175	122	154	..	4	21	17	92,111	121,970	6,662,650	7,183,796
Humble	4	..	3	..	..	..	1	..	4,650	....	1,545,375	1,751,720
Hutchinson County	709	..	646	..	25	..	38	..	362,715	....	24,000,340	.....
Jack County, b	74	..	25	..	..	..	49	..	1,215	....	.....	8,755
Jones County	2	..	2	..	..	..	..	..	920	....	45,880	.....
K-M-A—Iowa Park	162	217	78	129	..	..	84	88	3,382	9,443	1,692,708	1,742,690
Kleberg County	4	..	4	..	..	..	..	..	1,225	....	42,468	.....
Laredo District	400	92	189	80	90	12	121	..	75,603	17,935	4,346,869	3,776,303
Lytton Springs	..	181	..	172	..	1	..	8	....	79,862	1,955,555	2,570,709
Luling	6	14	6	14	..	..	..	..	7,600	2,541	7,832,575	9,706,346
Marion County, b	23	5	12	3	4	2	7	..	489	370	.....	.....
Markham	2	..	2	..	..	..	..	..	600	....	45,200	34,336
Medina County, b	16	..	9	..	6	..	1	..	1,221	....	.....	.....
Mexia	6	5	6	1	..	3	..	1	615	200	4,580,680	7,087,615
Mitchell County	36	36	33	33	..	..	3	3	2,475	3,590	288,990	798,895
Montague County	400	49	353	34	6	..	41	15	23,930	1,581	912,210	111,265
Nash Dome	16	..	11	..	..	..	5	..	5,732	....	207,128	.....
Nigger Creek	99	..	65	..	..	..	34	..	55,590	....	1,791,130	.....
Orchard Dome	2	..	2	..	..	..	..	..	2,100	....	76,717	.....
Orange	101	120	74	95	..	5	27	20	51,000	72,417	3,746,257	5,023,620
Palo Pinto	34	28	7	7	5	..	22	21	460	417	159,320	228,000
Panhandle, Misc., a	99	59	81	51	8	..	10	8	23,655	10,085	751,560	1,240,375
Panola County, b	15	27	4	1	6	23	5	3	67	20	.....	.....
Pierce Junction	33	15	29	7	..	..	4	8	24,229	8,755	907,235	292,356
Richland	4	28	1	15	..	1	3	12	500	1,495	643,602	2,037,095
Saratoga	16	31	8	19	..	..	8	12	895	1,628	455,975	587,507
Scurry, b	1	2	1	2	..	..	..	..	20	55	.....	19,000
Shackelford County	351	86	200	41	7	..	144	45	51,890	3,383	2,602,600	1,084,675
Spindle Top	180	47	143	32	..	..	37	15	378,941	2,683	13,370,005	428,873
Somerset	5	..	5	..	..	..	..	..	336	....	789,627	1,115,626
Sour Lake	74	53	64	40	..	..	10	13	37,844	3,032	1,815,352	1,585,054
South Liberty	15	196	9	158	..	..	6	38	8,330	130,324	2,117,757	4,551,290
South Vernon District	442	304	346	247	3	..	93	57	40,426	49,603	4,975,367	3,189,720
Stephens County	168	213	83	121	26	..	59	92	11,125	33,757	4,414,270	5,729.035
Throckmorton County	30	4	11	1	4	..	15	3	4,645	153	65,100	44,355
Waskom, b	15	70	1	..	12	64	2	6	10	....	.....	.....
West Columbia	11	26	7	14	..	1	4	11	1,630	406	3,330,767	4,230,115
Wortham	3	429	..	338	2	..	1	91	....	413,685.	3,250,090	16,838.150
Young County	563	575	298	299	..	..	265	276	16,730	46,310	2,767,580	3,432,320
Wildcats	406	489	36	70	4	5	366	414	17,005	17,677	.....	.....
Others, d	..	..	..	..	..	..	..	..	....	....	3,887,274	33,189
Totals	8560	6545	5287	4092	266	126	3007	2327	1,670,145	1,332,723	163,229,945	150,010,406

a—Panhandle miscellaneous included in "others" during first 9 months in 1926. b—Included in "others" 1926. c—Included in Montague. d—Includes first 9 months of Panhandle miscellaneous in 1926. e—First eight months 1926 included in "others."

Eastern States

State—	Completions 1926	Completions 1925	Producers 1926	Producers 1925	Gas Wells 1926	Gas Wells 1925	Failures 1926	Failures 1925	Initial Production 1926	Initial Production 1925	Annual Production 1926	Annual Production 1925
Illinois	341	261	226	167	6	8	109	86	8,771	8,970	7,766,000	7,863,000
Indiana	193	129	119	83	18	5	56	41	3,731	1,565	793,000	829,000
Michigan	95	2	83	2	..	..	12	..	1,945	....	98,000	4,000
Mississippi	1	..	..	..	..	..	1	..	.....	40	.....	.....
Kentucky	1317	1567	975	1048	55	122	287	397	15,085	21,159	6,280,000	6,759,000
New York	304	262	287	251	2	3	15	8	965	1,388	1,956,000	1,695,000
Ohio	2219	2411	1213	1406	555	529	451	476	27,592	23,630	7,322,000	7,212,000
Pennsylvania	2244	2108	1820	1662	270	277	154	169	10,177	8,655	8,942,000	8,097,000
Tennessee	37	43	24	19	1	5	12	19	4,653	3,653	44,000	24,000
West Virginia	1747	1733	550	527	862	906	335	300	9,231	6,398	5,975,000	5,763,000
Totals	8498	8516	5297	5165	1769	1855	1432	1496	82,150	75,467	39,176,000	38,246,000

Mountain States

WYOMING

Field—	Completions 1926	Completions 1925	Producers 1926	Producers 1925	Gas Wells 1926	Gas Wells 1925	Failures 1926	Failures 1925	Initial Prod. 1926	Initial Prod. 1925
Big Muddy	10	4	10	4	..	..	..	..	300	140
Big Horn Basin	42	..	18	..	..	..	24	..	2,020	....
Carbon County	51	..	33	..	3	..	15	..	4,835	....
Elk Basin	10	..	6	..	..	..	4	..	700	....
Freemont County	30	..	12	..	..	..	18	..	1,485	....
Grass Creek	8	4	7	3	..	..	1	1	1,505	150
Lance Creek	9	2	4	1	..	1	5	..	915	1,100
Natrona County	16	..	4	..	..	..	12	..	346	....
Osage	80	1	57	1	..	..	23	..	1,100	10
Rock River	7	2	6	2	..	..	1	..	290	235
Salt Creek	379	434	360	425	..	2	19	7	160,347	55,459
Teapot Dome	5	..	4	..	1	..	..	..	400	....
Miscellaneous	85	61	12	19	5	7	68	35	1,050	4,961
Totals	732	508	533	455	9	10	190	43	175,293	62,055

MONTANA

Field—	Completions 1926	Completions 1925	Producers 1926	Producers 1925	Gas Wells 1926	Gas Wells 1925	Failures 1926	Failures 1925	Initial Prod. 1926	Initial Prod. 1925
Cat Creek	43	11	17	11	1	..	25	..	865	388
Kevin-Sunburst	277	247	169	208	..	8	108	31	114,410	78,670
Miscellaneous	87	9	2	3	6	1	79	5	....	780
Totals	407	267	188	222	7	9	212	36	115,275	79,838

OTHER STATES

	Completions 1926	Completions 1925	Producers 1926	Producers 1925	Gas Wells 1926	Gas Wells 1925	Failures 1926	Failures 1925	Initial Prod. 1926	Initial Prod. 1925
Arizona	22	..	..	..	3	..	19	..	....	....
Colorado	99	35	35	14	5	..	59	21	12,175	4,616
North Dakota	5	..	..	..	1	..	4	..	....	....
South Dakota	5	..	..	..	..	..	5	..	....	....
Idaho	1	..	..	..	..	..	1	..	....	....
Nebraska	3	..	..	..	..	..	3	..	....	....
Nevada	3	..	..	..	..	..	3	..	....	....
New Mexico	197	58	93	55	21	1	83	2	12,740	15,388
Utah	31	1	2	..	5	..	24	1	10	....
Totals	366	94	130	69	35	1	201	24	24,925	20,008

Oklahoma

County—	Completions 1926	Completions 1925	Producers 1926	Producers 1925	Gas Wells 1926	Gas Wells 1925	Failures 1926	Failures 1925	Initial Prod. 1926	Initial Prod. 1925
Alfalfa	1	3	..	..	..	..	1	3	.....	.....
Atoka	1	2	..	..	..	..	1	2	.....	.....
Beckham	5	5	..	1	..	..	5	4	.....	15
Blair	1	..	..	..	..	..	1	..	.....	.....
Bryan	..	1	..	..	..	..	..	1	.....	.....
Burbank	..	103	..	98	..	..	..	5	.....	33,421
Caddo	25	7	15	4	1	..	9	3	684	155
Canadian	3	..	..	..	..	..	3	..	.....	.....
Carter	281	213	210	151	20	5	51	57	33,257	15,706
Cleveland	..	1	..	..	..	..	..	1	.....	.....
Coal	1	..	..	..	..	..	1	..	.....	.....
Comanche	49	10	15	4	..	..	34	6	702	148
Cotton	6	12	..	..	1	2	5	10	.....	.....
Craig	..	1	..	..	..	..	..	1	.....	.....
Creek	779	469	490	264	69	46	220	159	70,697	45,187
Custer	..	1	..	..	..	..	..	1	.....	.....
Dewey	1	1	..	..	..	..	1	1	.....	.....
Ellis	..	1	..	..	..	..	..	1	.....	.....
Garfield	270	153	190	126	2	3	78	24	168,140	128,578
Garvin	38	26	22	17	4	..	12	9	1,889	2,628
Grady	143	49	57	2	55	30	31	17	6,443	55
Grant	14	9	3	2	3	2	8	5	188	75
Greer	..	4	..	..	..	..	..	4	.....	.....
Haskell	..	4	..	..	..	..	..	4	.....	.....
Hughes	150	264	74	139	6	38	70	87	46,143	60,507
Jackson	2	2	..	..	..	..	2	2	.....	.....
Jefferson	76	46	46	26	3	2	27	18	8,302	7,317
Johnston	..	1	..	..	..	..	..	1	.....	.....
Kay	319	286	181	171	30	28	108	87	113,786	169,140
Kiowa	1	3	..	1	..	..	1	2	.....	10
Kingfisher	4	2	..	..	..	..	4	2	.....	.....

Continued on page 146

Oklahoma Production for 1926 and 1925 by Fields

Fields—	1926	1925
Blackwell	1,400,585	.....
Burbank	16,122,765	19,742,874
Bristow-Slick	10,682,160	15,580,131
Cromwell	6,341,200	12,096,503
Cushing	10,051,045	8,208,019
Davenport	4,379,835	633,485
Duncan District	2,691,905	478,520
Earlsboro	.....	.....
Fox	1,603,085	.....
Garber	11,139,390	6,220,930
Graham	3,174,140	.....
Healdton	5,506,145	695,775
Hewitt	3,908,615	5,750,493
Hubbard	895,375	.....
Lyons-Deaner	1,516,890	.....
North Braman	3,233,505	2,728,814
North Okmulgee	6,548,295	8,499,645
Osage (outside Burbank)	12,512,525	12,684,797
Otoe	.....	2,578,937
Papoose	4,118,175	7,775,391
Scholem-Alechem	294,190	.....
Seminole	9,391,905	.....
Stroud	888,810	1,296,953
South Braman	3,103,335	.....
Thomas	1,791,875	1,571,596
Tonkawa	13,682,260	23,249,322
Watchorn	1,093,395	.....
Yale-Jennings	5,236,545	.....
Wewoka	9,362,255	4,480,624
Others	25,780,375	33,678,856
Totals	176,450,580	167,951,575

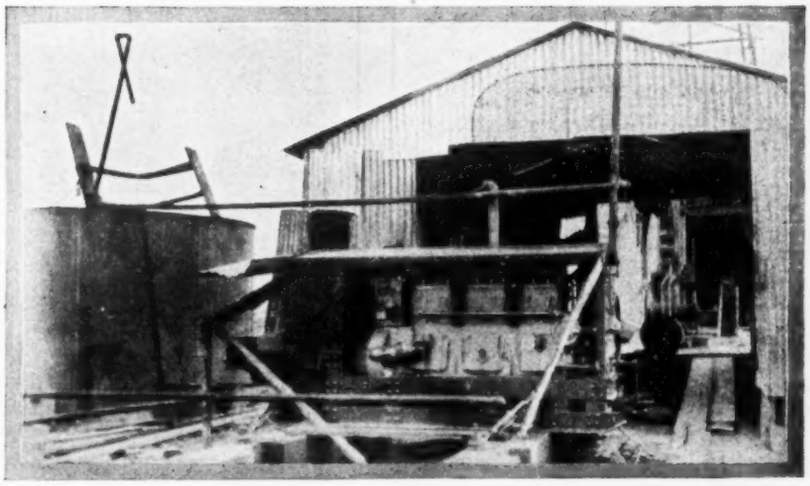
Kansas Production for 1926 and 1925 by Fields

Fields—	1926	1925
Augusta-Fox-Bush	1,786,575	2,054,643
Blankenship	.....	941,017
Churchill	922,560	.....
Eldorado-Towanda	5,166,135	5,257,313
Florence-Covert	672,070	747,784
Greenwood County	13,668,890	.....
Peabody-Elbing	1,560,995	2,146,207
Rainbow Bend	1,608,325	4,591,494
Russell	1,851,755	193,967
Others	13,065,065	9,436,101
Totals	40,302,370	34,497,756

Delivered One Day at 5 P.M.: Drilling Next Day By Noon

at Sun Oil Co's Burelson No. 6 McCamey, Tex.

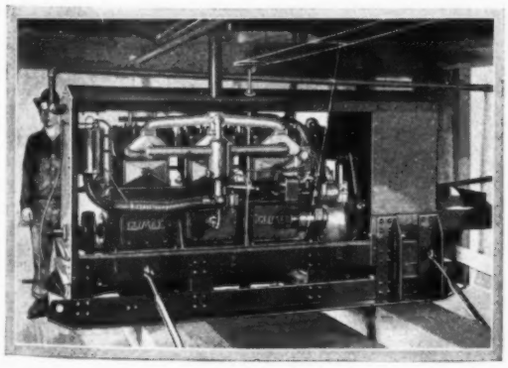
When it comes to getting on the job quickly, and making hole in record time, Climax Drilling Units are in a class by themselves. Transported easily by trucks, at small expense, they are skidded into position on their sled base—and ready to go at a touch of the electric starter.



CLIMAX

Trade Mark Reg. U. S. Pat. Off.

DRILLING UNITS

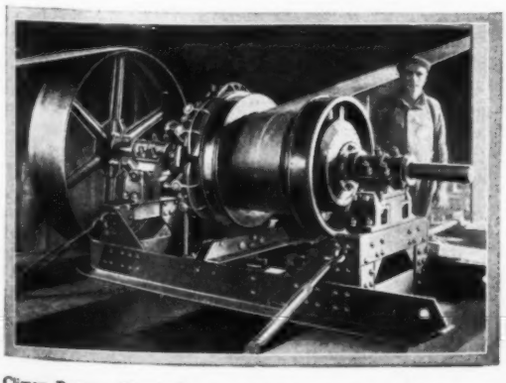


Climax Drilling Engine, 6 Cylinder, 6 x 7 inch. Uses gas or gasoline. Fully equipped, telegraphic control, etc. Engine mounted on structural steel skid frame. Weight 5,400 lbs.

On the job they are equally as outstanding in their performance and operating economies. Drillers find they—

—Give ideal drilling motion
—Handle any size string of tools
—Stall when tools stick—same as steam
—Use less than ½ bbl. of water per 24 hours
—Operate on gasoline or natural gas
—Are a necessity where water is bad or scarce and fuel costly.

Write for Bulletin H and List of Users



Climax Reverse Clutch Unit may be driven forward or reverse through 2 clutches. Picks up load without undue shock or jar. Neutral brake holds load stationary. Clutch and brake operated by one lever, with extension running to derrick floor. Weight 4,650 lbs.

CLIMAX ENGINEERING COMPANY
CLINTON, IOWA

Field Representative:
L. E. WILLIAMSON
c/o
National Supply Co., Tulsa, Okla.

Field Representative:
P. J. DASEY,
Westbrook Hotel,
Fort Worth, Texas

Exclusive Distributors for Climax Oil Field Units:

THE NATIONAL SUPPLY COMPANIES

CLIMAX ENGINEERING CO.
Clinton, Iowa

Gentlemen: Send me Free Bulletin H describing your Climax Cable Drilling Units.

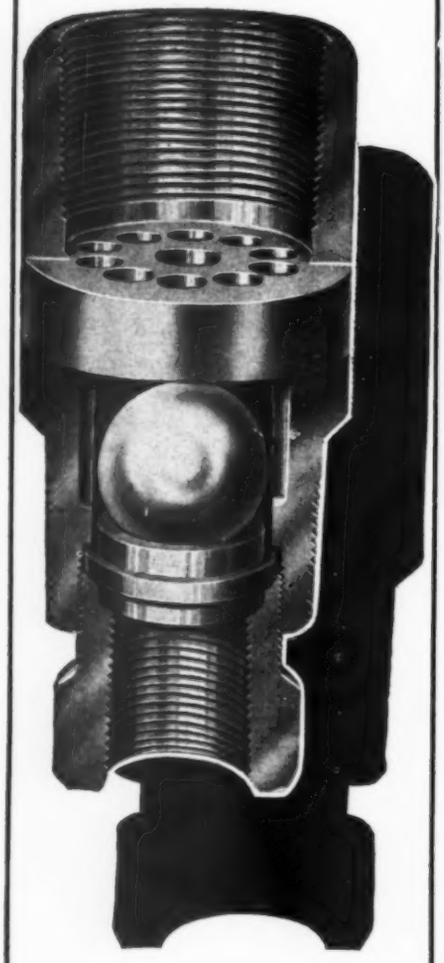
Also give me a list of installations where I may see these Units in operation.

Name .....

Address .....

Operating in ..... Field
O. W.

OIL
Is Where You Get It



But you can get more oil with Roark Standing Valves. It is the biggest improvement ever made in standing valve design.

BELOW instead of inside working barrel. Hence longer pump stroke, greater capacity and reduced cut oil and B. S.

No cups or troublesome leather rings. Long-lasting, efficient, economical. Preferred by hundreds of users.

Order from Your Supply House

Texas Oil Pump Co.
Waco, Texas

Oklahoma—Continued

	Completions		Producres		Gas Wells		Failures		Initial Prod.	
	1926	1925	1926	1925	1926	1925	1926	1925	1926	1925
Latimer	2	..	..	..	..	..	2	..	.....	.....
Le Flore	1	1	..	..	..	..	1	1	.....	.....
Lincoln	216	115	160	88	1	2	55	25	47,094	39,768
Logan	2	4	..	..	..	..	2	4	.....	.....
Love	7	3	..	..	..	..	7	3	.....	.....
Major	..	1	..	..	..	..	..	1	.....	.....
Marshall	12	5	2	2	..	..	10	3	27	.....
Mayes	..	1	..	..	..	..	..	1	.....	.....
McClain	1	..	..	..	..	..	1	..	.....	.....
McIntosh	7	8	..	1	2	2	5	5	.....	75
McCurtain	1	..	..	..	..	..	1	..	.....	.....
Muskogee	74	39	20	9	10	4	44	26	2,143	195
Noble	40	66	8	36	1	6	31	24	175	29,713
Nowata	9	3	8	..	1	..	..	3	228	.....
Okfuskee	185	253	71	123	32	28	82	102	21,258	41,286
Okmulgee	605	512	261	260	83	50	261	202	25,502	45,522
Oklahoma	7	1	..	1	..	..	7	..	.....	70
Osage	740	670	509	433	39	49	192	188	92,145	44,869
Pawnee	184	169	115	96	7	9	62	64	10,328	19,107
Payne	163	46	96	22	23	10	44	14	35,133	6,862
Pittsburgh	9	3	..	..	2	..	7	3	.....	.....
Pontotoc	31	18	3	5	7	1	21	12	245	115
Pottawatomie	7	4	4	1	..	..	3	3	5,432	30
Rogers	9	6	2	3	1	2	6	1	60	110
Seminole	292	332	211	241	12	15	69	76	345,871	111,452
Sequoyah	8	3	..	..	1	..	7	3	.....	.....
Stephens	217	202	75	91	26	36	116	75	4,081	4,500
Texas	3	..	..	..	..	..	3	..	.....	.....
Tillman	2	5	..	..	..	..	2	5	.....	.....
Tulsa	216	232	78	117	21	28	117	87	8,914	9,133
Wagoner	146	92	33	21	35	14	78	57	730	530
Washita	..	1	..	..	..	..	..	1	.....	.....
Washington	..	4	..	..	..	..	..	4	.....	.....
Woods	..	1	..	..	..	..	..	1	.....	.....
Woodward	4	..	..	..	..	..	4	..	.....	.....
Totals	5,370	4,479	2,959	2,557	498	412	1913	1,510	1,049,597	813,348

Kansas

County—	Completions		Producers		Gas Wells		Failures		Initial Prod.	
	1926	1925	1926	1925	1926	1925	1926	1925	1926	1925
Barber	2	..	..	..	..	..	2	..	....	....
Barton	2	2	..	..	..	..	2	2	....	....
Butler	308	130	180	64	2	1	126	65	23,387	5,884
Chase	35	14	2	8	4	..	29	6	130	1,155
Chautauqua	26	30	9	9	3	5	14	16	152	858
Clark	1	..	..	..	..	..	1	..	....	....
Clay	2	1	..	..	..	..	2	1	....	....
Coffey	18	9	..	5	..	..	18	4	....	....
Comanche	..	1	..	..	..	..	..	1	....	....
Cowley	155	313	86	206	8	13	61	94	10,717	91,090
Dickinson	..	1	..	..	..	..	..	1	....	....
Elk	126	120	66	60	17	23	43	37	6,850	3,562
Ellis	2	1	..	..	..	..	2	1	....	....
Ellsworth	3	..	..	..	..	..	3	..	....	....
Franklin	2	..	..	..	..	..	2	..	....	....
Graham	2	..	..	..	..	..	2	..	....	....
Greenwood	804	668	568	472	3	4	233	192	75,533	72,568
Hamilton	..	1	..	..	..	..	..	1	....	....
Harvey	5	5	..	..	..	..	5	5	....	....
Hughes	2	..	..	..	1	..	1	..	....	....
Jefferson	1	..	..	..	..	..	1	..	....	....
Kingman	11	1	..	..	1	..	10	1	....	....
La Bette	1	..	..	..	..	..	1	..	....	....
Lane	1	..	..	..	..	..	1	..	....	....
Lincoln	1	2	..	..	..	..	1	2	....	....
Logan	1	..	..	..	..	..	1	..	....	....
Lyon	140	20	56	9	..	..	84	11	9,255	535
Marion	23	16	6	5	1	1	16	10	970	484
McPherson	1	3	..	..	..	..	1	3	....	....
Mitchell	..	1	..	..	..	..	..	1	....	....
Montgomery	11	34	1	5	2	1	8	28	25	655
Morris	3	..	..	..	2	..	1	..	....	....
Osborn	3	..	..	..	..	..	3	..	....	....
Osage	4	1	..	..	..	..	4	1	....	....
Phillips	3	1	..	..	..	..	3	1	....	....
Pottawatomie	1	..	..	..	..	..	1	..	....	....
Reno	6	..	..	..	..	..	6	..	....	....
Rice	14	2	9	1	..	..	5	1	1,516	....
Riley	1	1	..	..	..	..	1	1	....	....
Rooks	3	2	..	..	..	..	3	2	....	....
Russell	38	53	33	43	..	1	5	9	5,472	9,806
Sedgwick	3	9	..	..	..	..	3	9	....	....
Shawnee	1	..	..	..	..	..	1	..	....	....
Sumner	48	33	24	7	..	1	24	25	17,306	726
Stafford	1	..	..	..	..	..	1	..	....	....
Trego	2	2	..	..	..	..	2	2	....	....
Wabaunsee	1	..	..	..	..	..	1	..	....	....
Wallace	1	..	..	..	..	..	1	..	....	....
Wilson	3	13	..	..	1	..	2	13	....	....
Woodson	29	45	13	22	..	1	16	22	1,740	540
Totals	1851	1537	1053	917	45	53	753	567	153,053	188,403

OUR NEW HOME

PHILLIPS PETROLEUM COMPANY
BARTLESVILLE, OKLAHOMA

A. I. M. E. PRODUCTION SYMPOSIUM FOR 1926

(Continued from page 82)

duction had increased to an amount similar to but less than the average production of California during 1926. Although a further increase in production could well be anticipated at the beginning of 1923, it was not until April that fairly accurate estimates of the peak of production for that year could be made. In 1922 there was hope also, that any peak reached might be quickly passed. At the end of 1926 production in California consists of a settled amount of about 600,000 barrels a day with 30,000 to 60,000 barrels of flush production and an additional 57,000 barrels shut in.

Drilling activity in the Seal Beach field is so great that there is little hope for anticipating any marked decline in production in the next six months for the entire state, while production may be materially increased.

Declines in flush production will not be as large as formerly because the gas lift will be used to stabilize production from wells that cease to flow and do not make good pumpers.

Review of Appalachian Fields for 1926

By GEORGE F. TURNBULL

Appalachian Fields

GEORGE F. Turnbull, points out in his review of Appalachian fields for 1926 that although the chances for discovering new pools in the eastern district become less each year, there were finds unearthed by the drill and by science in the Appalachian fields last year worthy of special mention.

He writes, "The results of the application of more improved scientific methods of oil production to the Bradford and Allegany fields are revealed in an ever upward line for production there and in an activity in fields work which ranks this pool as among the most active in the whole United States. Then there was the bringing of the Saginaw field in Michigan to a basis of oil production, the discovery of a new gas field in Central Ohio, and some excellent finds in Tennessee.

"In the Bradford district of Pennsylvania and the Allegany field, development work has pushed to an extent that has not been known for many years and production kept constantly increasing.

"Three improved methods of securing oil from the sand are now in use in the Bradford and Allegany fields. The one which is used the most is the water-flood method, which has been used for some years and is the main cause of the revival of interest in this field which for scores of years held the daily-average, high-grade-oil-production record of the country. The compressed-air method of forcing the crude from the sands is also in use by some of the operators and they claim that it has better results than the water-flood program. The soda-ash plan, which consists of the introduction of soda ash into the water flood, is also being tried out but it has not been experimented with long enough to prove whether or not it will be a success.

"The high spots of 1926 in the Appalachian fields were the scientific development of the Bradford, Pennsylvania, and Alligeny, New York, fields, the discovery of a new gas area in Guernsey County, Ohio, the building of much needed pipe lines to the Tennessee fields, the bringing in of good producers with some territory extensions in Kentucky, and the finding of an oil field in Saginaw, Michigan.

"For 1927 great activity can be expected in the Bradford field of Pennsylvania and the Allegany field of New York. Hundreds of rigs are already at work there and the indications are that the number will be greatly increased as spring approaches.

"An extension of the oil fields of Michigan is more than a possibility as the result of the plans for the drilling of many more wildcats there.

"As to the remainder of the Appalachain fields, everything depends on the price of crude oil; past experience shows that crude quotations are very uncertain and extremely difficult to predict a year in advance."

RECEIPTS OF CALIFORNIA OIL AT ATLANTIC AND GULF COAST PORTS, YEAR 1926

(Figures compiled by A. P. I. In thousands of 42-gallon barrels)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1926	1925
At Atlantic Coast Ports:														
Baltimore	290	303	217	571	839	736	638	460	315	426	192	423	5,410	2,081
Boston	418	329	78	154	245	330	90	322	216	318	498	221	3,219	2,600
New York	1,010	790	1,514	850	477	684	765	771	1,633	1,147	829	1,229	11,699	11,925
Philadelphia	601	683	515	402	417	1,034	454	550	662	184	706	230	6,438	4,967
Others	216	563	604	686	550	534	365	620	339	569	519	303	5,868	4,421
Total	2,535	2,668	2,928	2,663	2,528	3,318	2,312	2,723	3,165	2,644	2,744	2,406	32,634	25,994
Daily average	82	95	94	89	82	111	74	88	106	85	91	78	90	71
At Gulf Coast Ports:														
New Orleans and Baton Rouge	....	....	....	....	....	....	....	....	....	....	....	....	....	1,509
Sabine District	....	....	....	141	200	....	....	....	....	....	....	....	341	377
Tampa	20	....	....	....	....	....	20	....	....	23	....	....	63	57
Total	20	....	....	141	200	....	20	....	....	23	....	....	404	1,943
Daily average	1	....	....	5	6	....	1	....	....	1	....	....	1	5
At Atlantic and Gulf Coast Ports	2,555	2,668	2,928	2,804	2,728	3,318	2,332	2,723	3,165	2,667	2,744	2,406	33,038	27,937
Daily average	83	95	94	94	88	111	75	88	106	86	91	78	91	76
Distribution of receipts was as follows:														
Crude	1,001	1,289	889	1,259	1,122	1,467	1,222	1,077	723	880	523	695	12,147	
Gasoline	502	666	785	485	740	812	516	747	690	645	805	622	8,015	(Not
Gasoline Tops	162	80	....	....	....	....	....	....	....	80	72	....	394	Avail-
Gas Oil	240	219	263	320	357	529	450	494	437	630	228	695	4,862	able)
Fuel Oil	515	346	991	615	509	452	144	347	1,257	375	1,058	394	7,003	
Lubricating	135	68	....	125	....	58	....	58	58	57	58	....	617	
Total	2,555	2,668	2,928	2,804	2,728	3,318	2,332	2,723	3,165	2,667	2,744	2,406	33,038	

It's a Wilson

The Champion *of* Tongs

WILSON CASING TONG

2-step feature
—permits tonging casing or collar.

Powerful spring-latch
—latches almost automatically.

Special alloy pins
—keep jaws from sagging.

Quick-change bushings
—easy and simple to click into place.

Powerful leverage
—distribute proper force evenly around casing.

Carried by Leading Supply Houses

Wilson Oil Tools Corp.

DISTRIBUTORS FOR

Wilson & Willard Mfg. Co.

Factory and Distributor's Office — It's a Wilson — 2301 East Vernon Ave.

Los Angeles, Calif.

SALES OFFICES:

TULSA, OKLA., 409 Atlas Life Bldg.
HOUSTON, TEXAS 219 Post Dispatch Bldg.,
AMARILLO, TEXAS 1501 Polk St.

Output Gain Reveals Advances in Petroleum Technique

(Continued from page 54)

ing the larger demands prevailing for petroleum products. Refinery activities have shown an upward trend during the latter three-quarters of 1926, with a sharp upturn during the closing months of the year. The year 1927 is entered with refinery operations (as well as drilling and production) displaying a relatively high degree of momentum.

Gasoline

The outstanding features of the gasoline situation in 1926 were: The maintenance of a remarkably large demand, averaging about 42,000,000 barrels, or 17.3 per cent, over 1925; an important increase in the output of cracked gasoline, amounting to 22,000,000 barrels, or 32 per cent, over the production of this type of gasoline in 1925; and a slight reduction in the quantity of gasoline held in storage. These features are shown in the following table:

The rate of growth in the demand for gasoline over the past ten years has been a remarkable feature of the oil business. During this period, the annual rate of growth, determined by fitting a compound interest curve to the data by the method of least squares, has been 17.5 per cent. The equation of this fitted curve is $Y=68.0\ (1.175)^n$, origin at 1917, unit=1 million barrels. The data together with the fitted curve are shown in graphic form in Fig. 11.

The trend of the output of cracked gasoline is shown by months for 1925 and 1926 in Fig. 7B, while the relation of this factor to the total supply of gasoline and the ratio of total gasoline production to the volume of crude oil charged to stills is displayed in Fig. 7A. It is seen that the increase in output of cracked gasoline has been substantial and progressive and a growing proportion of our crude oil supply is being converted into gasoline.

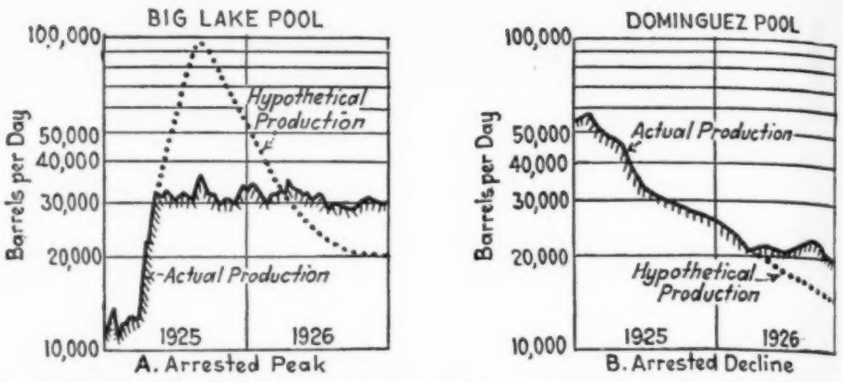


Fig. 4—Diagrammatic illustration of two new economic forces affecting crude oil production in the United States. A. Arrested accline of an oil pool as a result of economic control of drilling under non-competitive conditions (unit operations). B. Arrested decline of an oil pool as a result of improved production technique.

A further interpretation of the gasoline situation is presented in Fig. 8 which shows by months from 1918 to the present, the correlation existing between stocks of gasoline in the United States (corrected for seasonal growth) and the spot price of 58-60 motor gasoline on the Tulsa market. This correlation, and the technique underlying it, was presented[1] at the 1925 annual meeting of the Institute, and it is here shown with the 1926 data added. It may be observed that the trend of the gasoline situation since 1923 has been in the direction of statistical improvement, although the situation lost strength during the second half of 1926 and 1927 was entered with a gasoline carry-over above "normal," though relatively smaller than the carry-over into 1926.

During the year a new element made its appearance in the gasoline situation, which may have some bearing upon both future supply and price. This new element arises out of competition for the favor of the consumer, and is taking the direction of improvement in the quality of the product. A number of companies, responsible for a sizeable proportion of the country's gasoline output, have standardized on a higher-gravity lower-end-point product which is designed to improve the quality, if not the efficiency, of performance in the motor. The extent to which this movement will go is not clear, but the effect of the tendency is to cut down the percentage of straight-run gasoline derivable from a barrel of crude oil and probably also to add a further stimulus to the growth of cracking.

Fuel Products

The outstanding economic factors in respect to kerosene and fuel oil are found

[1] J. E. Pogue: The Relation between Price and Stocks of Gasoline. Petroleum Developments and Technology in 1925, A. I. M. E. Pamphlet No. 1670-G 732-737.

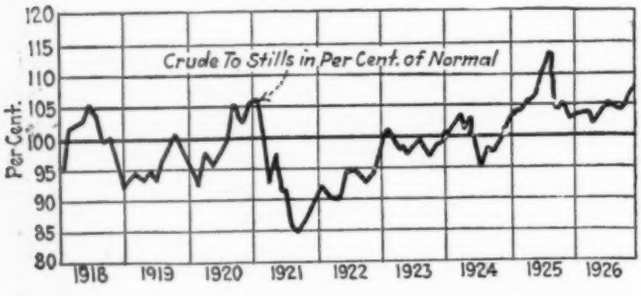


Fig. 6—Index of refinery operations in the United States by months, 1918-1926

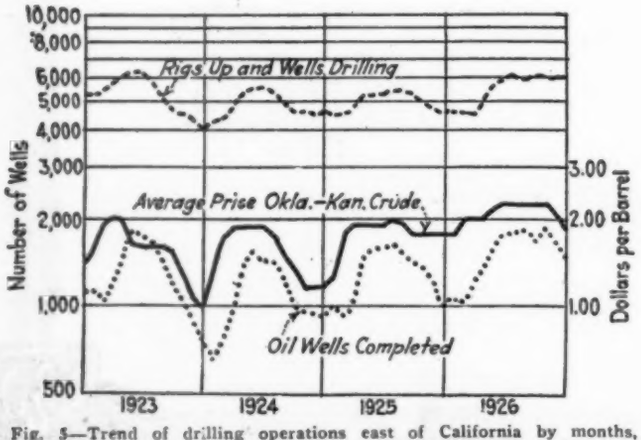


Fig. 5—Trend of drilling operations east of California by months, 1923-1926, showing the high degree of correlation with price, and the momentum maintained at the close of 1926.

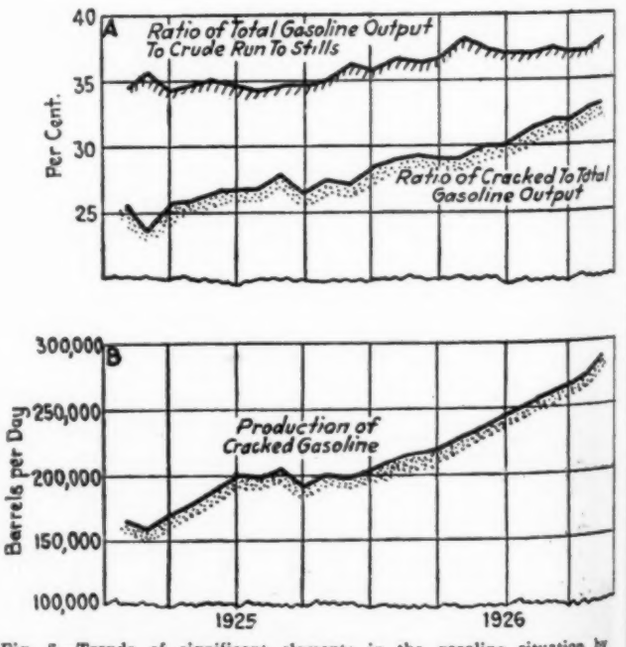
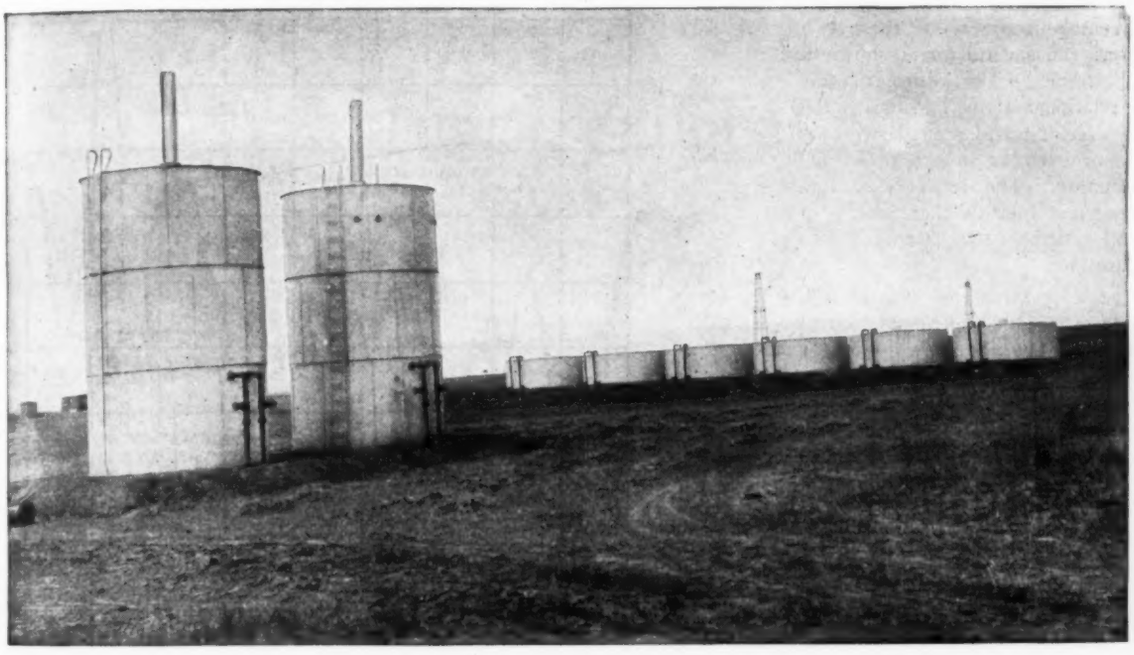


Fig. 7—Trends of significant elements in the gasoline situation by months, 1925-1926. A. Percentage recovery of gasoline from crude oil and proportion of total gasoline output contributed by cracking. B. Daily rate of production of cracked gasoline by months, 1925-1926.



"Best Battery of Tanks I Ever Saw"

was the comment of a man who has had a lot to do with field tanks in all the oil fields of the country.

And the Columbian Bolted Tanks on this lease (NW¼ of Sec. 15-25-2W, Ponca City district) are as good as they look.

The two 3-ring 750 barrel flow tanks have:

12 gauge bottoms,
12 gauge sides,
12 gauge decks,
12 gauge stacks

and interior reinforcement, making them capable of carrying up to 2 pounds gas pressure if necessary.

The six low 500 barrel stock tanks also have:

12 gauge bottoms,
12 gauge sides, and
14 gauge decks

Both the flow tanks and the stock tanks are of vapor tight construction—evaporation on this lease is nil.

A feature of this installation, not often seen, is the carrying of the lines underground from flow to stock tanks.

The unrivaled Columbian field organization is making installations like this every day and many nights in all fields. Each unit maintains adequate stocks and trained erecting crews for day and night duty. Specify Columbian and you can depend upon the best in tanks and in service.

COLUMBIAN STEEL TANK COMPANY

EST'D 1894

TANKS FOR THE WORLD

1405-1625 WEST 12TH STREET KANSAS CITY, MISSOURI

in the ratios of the production of each of these products to the volume of crude oil charged to stills. As shown in Table 4, the percentage recovery of these two products has for several years shown a downward trend. The cause of this changing relationship is primarily the growth of cracking and secondarily progressive improvements in the efficiency of fractionation. The recovery factors for kerosene and fuel oil, therefore, bear a reciprocal relation to the recovery factor for gasoline.

The development of fuel oil through cracking as a second important source of gasoline has brought a revolutionary economic force into the petroleum situation. For the period that cracking can continue to expand adequately, this factor has divorced the price of gasoline from the price of crude oil (see Table 6) and set up fuel oil as the great equalizing element between the supply of crude oil and the demand for gasoline. Thus the economics of petroleum rests upon a triangle of forces, which are interdependent and to a large degree automatic in adjustment. When there is a deficiency of crude oil, crude oil prices advance, profits in making cracked gasoline become larger, and cracking plants are built in growing numbers until the demand for gasoline is met from relatively less crude petroleum; there being a corresponding decrease in the output of fuel oil, whose elastic demand contracts proportionally. When the crude oil supply, on the contrary, becomes too large, crude oil gets cheaper, the profit incentive for expanding cracking operations loses force, and more crude oil is converted into fuel oil, whose demand is quickly responsive to a lowering of price. These relationships will serve to interpret many of the price movements of the past few years.

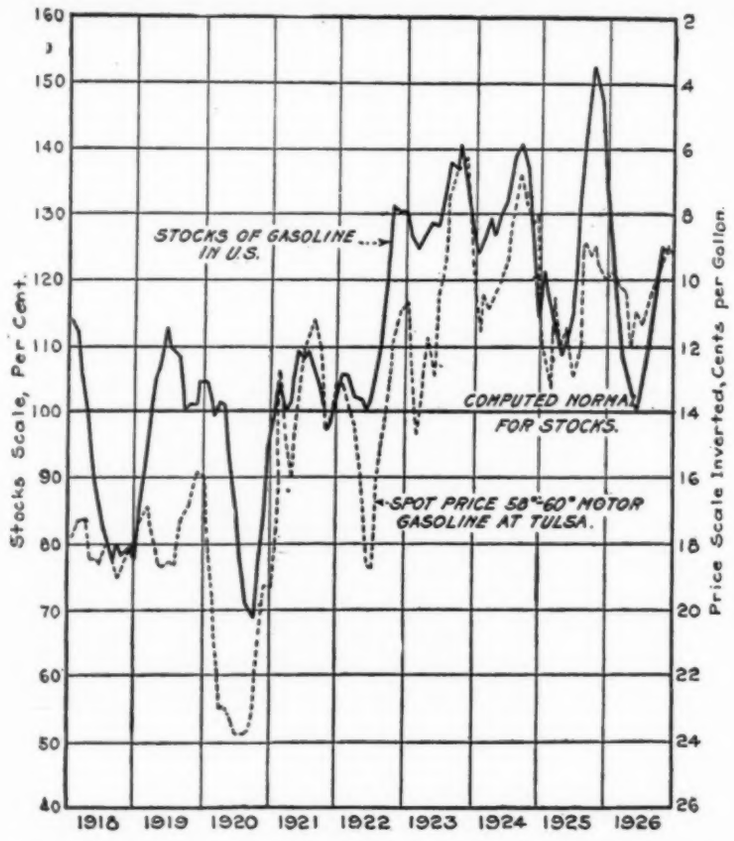


Fig. 8—Correlation between stocks of gasoline in the United States (expressed in percentages of computed normal) and the spot price of motor gasoline at wholesale in the Tulsa market, by months, 1918-1926.

Exports

An important feature of the oil business in 1926 was the substantial increase in exports, which showed a gain of 18,400,000 barrels, or 16.8 per cent, over 1925. The trend of the principal elements composing the export movement is shown in Table 5, where it appears that the chief component in the gain was gasoline, which showed an increment of 12,500,000 barrels, or 39.4 per cent. The large overseas movement of gasoline was an important element in maintaining domestic prices for this commodity.

During the closing months of 1926, the large water movement of oil resulted in a shortage of tankers and a consequent rise in tanker rates, with important results in oil markets.

Prices

One of the striking features of 1926 in the petroleum industry was the progress gained in the direction of price stabilization. This trend is graphically indicated by Fig. 9, which shows for the past five years monthly index numbers representing the weighted average price of crude petroleum and petroleum products in the United States. It may be readily observed that the amplitude of the price cycle was less in 1925 than in 1924, and still less in 1926 than in 1925.

A more detailed analysis of price movements during 1926 is afforded in perspective by Table 6 and Fig. 10. The tabular and graphic data there presented represent a continuation of the index numbers of oil prices previously published by the author[2] Table 6 indicates that oil prices in 1926 averaged higher than in 1925, the percentage changes running as follows:

		Per Cent
Crude oil	=.....	+ 3.5
Gasoline	=.....	+ 5.8
Kerosene	=.....	+19.9
Fuel Oil	=.....	+ 0.8
Lubricants	=.....	0.0

Fig. 10 shows that oil prices tended to advance during the first half of the year, displaying relative stability during the third quarter, and receded during the fourth quarter. The declines, however, were less severe than the corresponding recessions of a number of previous years.

In terms of the general price level of all commodities, the average prices of gasoline and fuel oil during 1926 stood at 76 per cent and 91 per cent respectively, while the price of crude petroleum, kerosene, and lubricants averaged 118 per cent, 124 per cent, and 113 per cent, respectively. The relative cheapness of gasoline is worthy of particular note during a year when crude oil stocks were re-

[2] J. E. Pogue: The Trend of Prices in the Petroleum Industry. Petroleum Development and Technology in 1926," A. I. M. E. Pamphlet No. 1670-G, 738-744. See for explanation of index numbers.

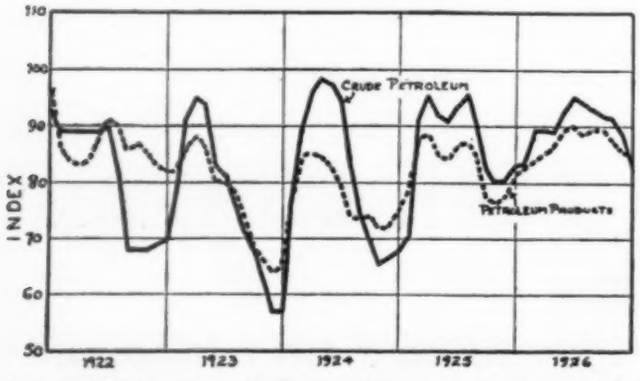


Fig. 9.—Relative prices of crude petroleum and petroleum products in the United States by months, 1922-1926, illustrating the trend toward price stabilization during the past two years. (Prices in 1919=100)

Resources Exceed $50,000,000

The Exchange National Bank

Oklahoma's Largest Bank

Officers

J. J. McGRAW, President
H. F. SINCLAIR, Vice-President
R. M. McFARLIN, Vice-President
W. A. BROWNLEE, Vice-President
E. W. JACOB, Vice-President
F. M. SOWLE, Vice-President
R. M. MOODY, Vice-President
R. ELMO THOMPSON, Vice-President
N. R. GRAHAM, Vice-President
H. J. GREEN, Cashier
G. A. GUNN, Assistant Cashier
E. L. BRADSHAW, Assistant Cashier and Auditor.
F. C. FREEDLEY, Asst. Cashier
J. F. MATCHETT, Asst. Cashier
W. L. McDONALD, Asst. Cashier.
P. D. HAYES, Asst. Cashier
D. R. BATES, Asst. Cashier
P. J. CASHMAN, Asst. Cashier
R. E. YOUNG, Asst. Cashier

Directors

E. W. SINCLAIR
J. H. EVANS
R. M. McFARLIN
J. J. LARKIN
DANA H. KELSEY
E. P. HARWELL
J. H. MARKHAM, JR,
JOHN Y. MURRY
J. J. McGRAW
H. F. SINCLAIR
J. A. HULL
J. A. CHAPMAN
H. H. ROGERS
W. A. BROWNLEE
H. G. BARNARD
GEORGE S. BOLE
H. L. STANDEVEN

Credit Sentry of the Oil Fields

The history of The Exchange National Bank of Tulsa, known the world over as "The Oil Bank of America," is synonymous with the history of the Mid-Continent Oil Field. Among the officers and directors of this bank are found many of the most successful men in the oil industry. Intimate knowledge of business and financial conditions combined with a specialized department on oil credits enables The Exchange National to render customers invaluable service.

With a Capital of $2,000,000 and Earned Surplus of $1,000,000 the Evidence of Strength and Confidence Is Irrefutable.

The EXCHANGE NATIONAL BANK

With which is Affiliated — *The Exchange Trust Company*

Exchange NATIONAL BANK TRUST COMPANY TULSA

duced. The trend of crude oil prices in percentages of the general price level (that is, corrected for variations in the purchasing power of the dollar) is given for the past 14 years in Table 7.

Summarized Trend

As a summary of the major trends that have manifested themselves in the petroleum situation, Fig. 11 is presented. This chart shows for a period of years the demand for gasoline, the domestic production of crude petroleum, and the ratio of gasoline produced to crude oil charged to stills. To each set of data a trend line, or series of trend lines, has been fitted. These trend lines are compound interest curves fitted by the method of least squares; as the data are plotted on semi-logarithmic paper, the trends appear as straight lines. Production has changed its trend twice during the period shown; the trends of the other two factors continue through 1926 unaltered. The chart illustrates how the rapid growth in the demand for gasoline has been met by a crude oil supply expanding (with the exception of a brief period, 1920-23) at a substantially slower rate. The present trend of the crude-production and gasoline-demand curves cannot be safely projected into the future; it is probable, however, that the ratio curve for some time ahead will tend to follow its present course, continuing to multiply by a growing factor the economic value of the barrel of crude and relieving the supply of crude oil from the necessity of fully keeping pace with the further expansion in the demand for gasoline.

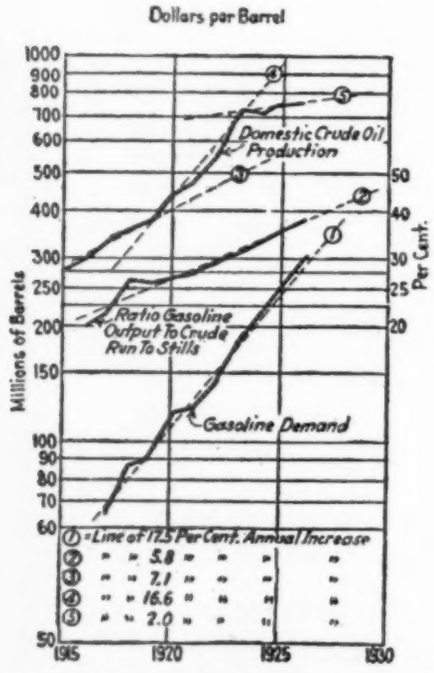

Dollars per Barrel
Millions of Barrels
Per Cent.
Domestic Crude Oil Production
Ratio Gasoline Output To Crude Run To Stills
Gasoline Demand
① = Line of 12.5 Per Cent. Annual Increase
② " " 5.8 " " " "
③ " " 7.1 " " " "
④ " " 16.6 " " " "
⑤ " " 2.0 " " " "
1915
1920
1925
1930

Fig. 11.—Diagrammatic representation of the basic economic trends in the petroleum industry, illustrating the bearing of the increasing recovery of gasoline upon the quantity of crude oil required to meet the demand for gasoline. Trend lines are compound interest curves fitted to the data by the method of least squares

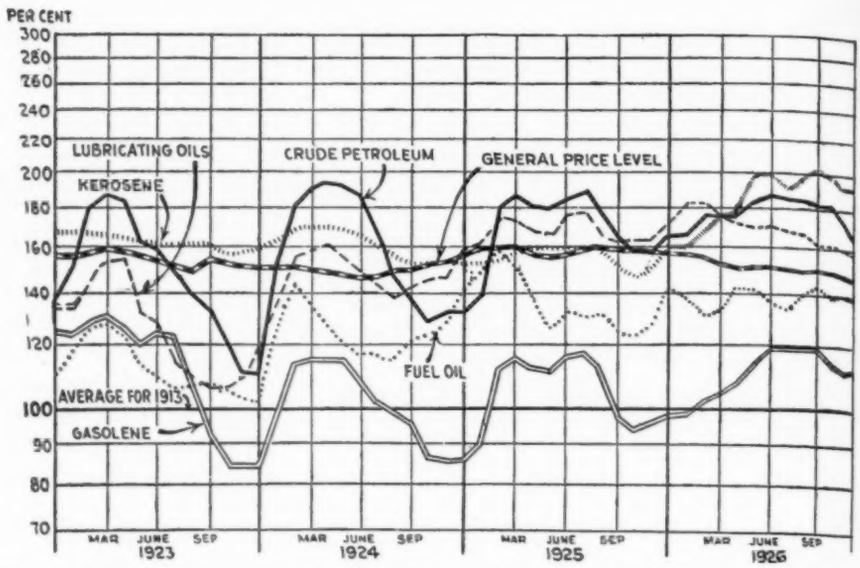


Fig. 10—Trend of the relative prices of crude petroleum and its principal derivatives in the United States by months, in percentages of the average prices in 1913 and in comparison with the general price level. (Prices in 1913 100.)

Table 6.—Trend of Relative Prices of Crude Petroleum and Its Derivatives in the United States, by Years from 1913 to 1926 Inclusive, and by Months, 1926

Prices in 1913=100

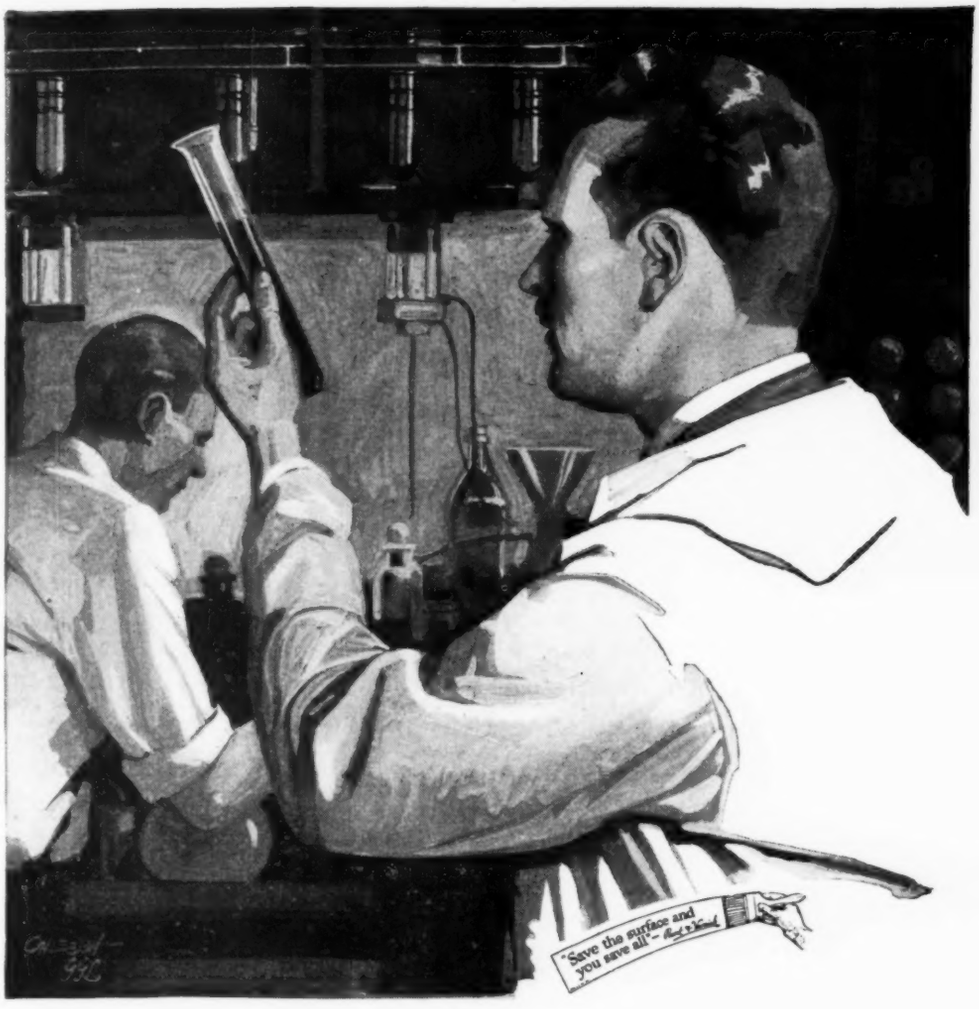
Year	Crude Petroleum at Wells	Gasoline, Tank-wagon	Kerosene, Tank-wagon	Fuel Oil at Refinery	Lubricating Oils Jobbing Quotations	All Commodities U. S. Bureau of Labor Statistics
1913	100	100	100	100	100	100
1914	82	83	97	85	101	98
1915	66	75	90	68	97	101
1916	117	121	101	98	119	127
1917	155	132	108	147	126	177
1918	195	139	130	189	200	194
1919	197	142	162	149	209	206
1920	302	170	217	262	318	226
1921	163	143	164	122	179	147
1922	156	140	158	117	132	149
1923	150	112	163	113	125	154
1924	161	102	162	127	149	150
1925	172	106	156	137	170	159
1926	178	112	187	138	170	151
By Months 1926						
January	165	99	160	137	183	156
February	177	102	169	131	183	155
March	176	105	177	135	179	152
April	176	109	178	142	173	151
May	183	117	198	141	170	152
June	188	119	200	136	171	152
July	186	119	190	134	169	151
August	184	119	196	140	166	149
September	182	119	204	143	161	151
October	182	114	195	139	161	150
November	174	111	119	140	159	148
December	163	112	181	139	158	147

Table 7.—Index Numbers of Oil Prices Expressed in Percentages of the Average Price Level of All Commodities

Prices of All Commodities=100

Year	Crude Petroleum	Gasoline	Kerosene	Fuel Oil	Lubricating Oils	All* Commodities
1913	100	100	100	100	100	100
1914	85	80	99	87	103	100
1915	65	74	89	67	96	100
1916	92	95	80	80	94	100
1917	88	75	61	83	71	100
1918	100	72	67	98	103	100
1919	96	69	79	72	101	100
1920	133	75	96	116	140	100
1921	111	97	112	83	122	100
1922	105	95	106	79	89	100
1923	98	73	106	74	81	100
1924	107	68	108	85	99	100
1925	108	67	98	86	107	100
1926	118	74	124	91	113	100

*U. S. Bureau of Labor Statistics.



Many of the 6,819 Arco Protective Products
were formulated especially for your needs

Remember this . . . we kept constantly in mind the severe conditions peculiar to the oil and gas industries when many of the 6,819 Arco protective products were formulated. *These specific paints were made to meet your particular requirements.*

For example . . . Arco Tank Paints provide a permanent rust-resisting finish for storage tanks, tank cars, auto tank trucks, etc.

Arco Pipecote is a heavy-bodied paint that insulates perfectly against the damaging effects of moisture, alkalis and acids. It settles the question of pipe line protection once . . . for all time.

And there are hundreds of other Arco products. Each one is made to do one job . . . and do that *one job well.*

Tell us your problems. We'll be glad to make recommendations. Feel free to write us at any time. Why not today . . . while this subject is fresh in mind?

THE ARCO COMPANY ▾ CLEVELAND, OHIO
PAINTS ▾ VARNISHES ▾ ENAMELS ▾ LACQUERS (67)

ARCO

PAINTS VARNISHES ENAMELS LACQUERS

Say you saw it in The OIL WEEKLY

Complete Oil

Time alone does not build a business—Dependable friendly service that is rendered by the Republic organization and the established merit of the products distributed have combined in the development of the Republic Supply Company from one store to stores now serving all the active fields throughout Texas, Louisiana, Arkansas and Oklahoma.

Use your nearest Republic service store.

Republic

General Offices,
HOUSTON, TEXAS

Stores and Representatives

OKLAHOMA

Tulsa
Beggs
Bristow
Duncan
Garber
Okemah
Ponca City
(Box 1087)
Seminole
Shidler
Stroud
Tonkawa
Wewoka
Wilson
Yale

LOUISIANA

Shreveport
Monroe

Say you saw it in The OIL WEEKLY

Field Supply Service

DISTRIBUTORS OF:

"Republic"

Casing, Line Pipe, Drill Pipe and Tubing

Standard Seamless Oil Country Pipe
Broderick & Bascom Wire Lines
Hughes Tool Co. Products
Crotty & Company Cable Tools
Jones Sucker and Pull Rods
Howe Rotary Chain
Powell Valves
Walworth Fittings
Wall Manila Cordage
Republic Rubber Belting
R&J Dick Balata Belting and Valves
Kibele Pressure Pistons
Spang Weldless Drilling Jars
Hough Pumping Equipment
Bradford Pumping Equipment
Penberthy Injectors
"Master-Kem" Cement Accelerator
Reed Roller Bit Co. Products

"GUMBO BUSTER" Rotary Machinery

Supply Co.

General Offices,
HOUSTON, TEXAS

and Representatives at:

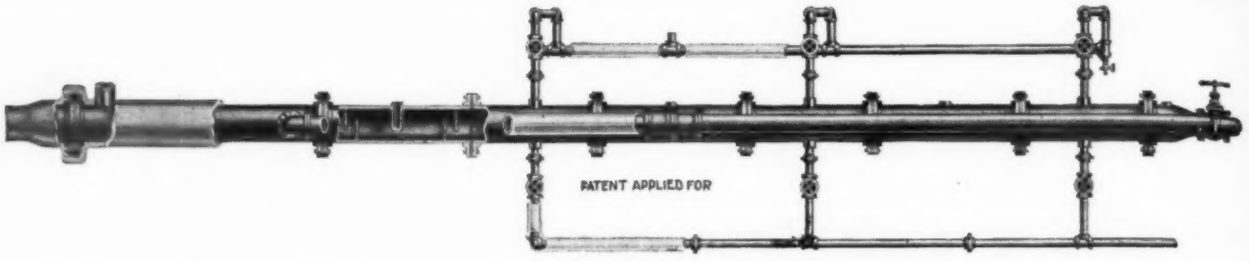
ARKANSAS

El Dorado
Smackover

TEXAS

Houston
Breckenridge
Burkburnett
Corsicana
Electra
Isom
McCamey
Nocona
Olney
Pampa
Wichita Falls

Say you saw it in The OIL WEEKLY



Have You a Cut Oil Problem?

Our experience should be of value to you

If you are having trouble—let one of our representatives help you solve it. Write or wire

The above Illustration is a typical 4-unit Installation of our

OIL TREATING PLANT

—a unit that has Proven unusally successful in various Fields of Texas, Oklahoma, Arkansas and Louisiana.

—No complicated fittings
—Easily erected
—Portable

Houston Pump & Supply Company

Houston, Texas

H. F. WILCOX OIL & GAS COMPANY

PRODUCERS OF CRUDE OIL AND MANUFACTURERS OF NATURAL GASOLINE

WILCOX BUILDING TULSA, OKLAHOMA

Say you saw it in The OIL WEEKLY

WHAT OF THE YEAR 1927?

The moral of this story is that you never can tell

By ARTHUR KNAPP

THE role of a prophet has been a discredited one from the time of the Old Testament. The trouble is that the prophet is influenced by his mental attitude and his desires, no matter how much he may try to avoid it. Give a man a good meal and, if his indigestion is in shape, it is almost impossible for him to be a pessimist. Give a company a good business year and it would take a national calamity to change the rosy picture of the future which a good business year always paints. Even when business has not been so good, desire and hope can bend upward any business trend which seems to have a downward tendency.

This puts the majority on the bright side and, if an unbiased picture is sought, it is necessary to compare the prophecies of the optimist and the pessimist in the ratio of at least 1 to 10. This is rather hard on the prophets and it is going to make the writer's role hard, for, if his picture is pessimistic, then the reader will conclude that the writer has indigestion and if it is optimistic then he has had a good business year.

Prophecies of the Past.

Several years ago the oil industry had its first real get-together meeting in Washington under the auspicies of the A. P. I. Many a ponderous address was delivered, each speaker trying to outdo the previous one in the length and sonority of his address. The air quivered with prophecy. The old team of the Law of Supply and Demand was hitched up to the buggy of the Oil Industry with a full equipment of curb, check-rein and blinkers. Unfortunately, no sooner was the team well started than a whole parcel of dogs named Mexia, Tonkawa, Bristow, Burbank, Smackover and right smart other hounds, started in a barking and it so scared this team of Supply and Demand that they just naturally kicked the buggy plumb out from under the oil man.

They haven't found the gasoline wheel yet.

The moral of that story is that you never can tell.

The Future.

Nothing sudden is likely to happen during the year and, after all, business is most afraid of sudden things. The panic of 1907 was a panic because of a few sudden happenings and not because of the magnitude of the happenings.

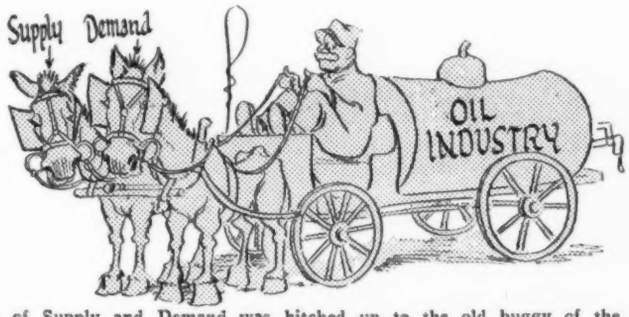
The oil business can take care of normal contingencies and many abnormal ones without any disruption of business. As long as no sudden changes may be expected, things should move along very smoothly for the Industry during the year.

The markets of all petroleum products are too broad to move with speed. A large increase or decrease in gasoline consumption could scarcely come over night. Automobile registration and sales indicate a normal increase in the consumption of petroleum products used by the motorist during the coming year. The railroads are in excellent condition and should use their quota of fuel oil as should the public utilities generating electricity and the gas companies. No overnight cessation in ocean transportation appears possible, so that the demand for bunker oil will be normal. Changes may come but they will cast their shadow before them and give the Industry time to adjust itself.

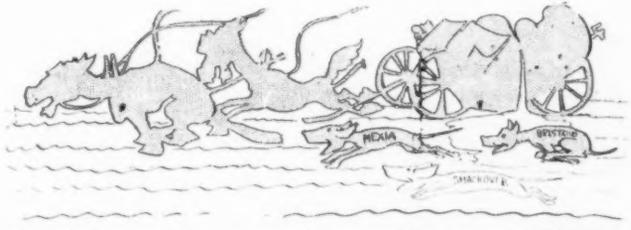
The crude situation is good or bad depending upon which side of the fence one sits. There will certainly be plenty of crude. There may be too much crude. Even so, the crude market is gradually losing its hysteria of former years and moving slowly and carefully and less like an old maid when a fire-craker is set off under her chair.

The Conservation Board has made its report so that investigations will probably be quoted below par in 1927. As a matter of fact, the oil business is getting broken in to investigations and does not shy at them as it used to do. There has not been an investigation in recent years that has not done the Industry more good than it did the investigators. These investigations act like ethyl gas, they cut out the knock and increase the speed. Nothing could have pushed this matter of the conservation of gas pressure on producing sands as did the public hearing of the Conservation Board which was held in Washington. Three-quarters of the report of the Board was discounted at this meeting.

The writer does not know whether or not Seminole will decline to 100,000 barrels per day by June 1st and whether Panhandle will ever reach 200,000. That information is necessary for a detailed study of the individual fields. It is not practicable, however, to combine the microscope and the telescope. The broad picture becomes confused if it is a mosaic made up of a number of microscopic ones. The master artist paints with a broad firm stroke, the master business man, in judging the future to determine his marketing policy, needs the same touch.



The old team of Supply and Demand was hitched up to the old buggy of the Oil Industry with a full equipment of curb, check-rein and blinkers.



Unfortunately a whole parsel of dogs started in a barking and scared the team of Supply and Demand

West Texas Thought to be Source of Much Future Oil

(Continued from page 72)

condition, due to the lime logging more than 1100 feet higher on the discovery well than a dry hole drilled about five miles to the northeast in Corckett County. Production of this discovery well was shut in December 28 pending the completion of a 55,000 barrel steel tank on a nearby hill. This well is the shallowest producer in the entire West Texas district, and heavy gas pressure with the oil is looked upon with favor, as only a few oil producing areas in the district offer a big gas flow with the oil.

The nearest approach to a true oil sand pay in West Texas is found in the Chalk-Clay shallow oil district in southeastern Howard County, and due to the new wells maintaining a comparatively slow decline in production after going on the pump the lease owners launched an active drilling campaign late in 1926. Production in this field brings a flat price of $1.50 per barrel at the well, and drilling expense is reasonable, since rotary is used to within about 100 feet of the 1100-1600 and 1700-foot pay, and the wells completed with star machines.

A section of the state that offered very little interest to the wildcatter and major lease buyers was suddenly thrown into the limelight in September, 1926, when the Phillips Petroleum Company developed a 1000 barrel 40 gravity flush producer in southwestern Jones County. This area had been partially explored in previous years, and was generally believed to be a barren stretch lying between the Cisco and Strawn oil sand pays on the east and the dolomite lime and sandy-lime pay on the west. The Phillips Petroleum Company became interested in the area through favorable oil showings obtained by a wildcat drilled some years previous to the northeast of the discovery well, and also by favorable geological information developed through extensive study of the entire region. Noodle Creek became the name of this new field, and wildcat drilling followed in short order in parts of Jones, Fisher, Nolan and Taylor Counties. The importance of this new strike from a production standpoint is yet to be determined, since the development has been confined to close-in locations, while the wildcat drilling boom has not been underway long enough to afford many decisive tests.

Independent operators and companies have figured in the opening of all of West Texas fields, except for the Gulf-McElroy and Iatan pool, and of the 22 wildcat discovery wells listed in the accompanying table, 13 of the total have changed hands after oil or gas was developed. In most instances the purchasers of these wildcat producers were members of the Standard group, or major producers of oil. This high percentage of discovery well sales is due to the great expense in providing tankage, and pipe line outlets to car rack at railroads to reach a market with the production.

West Texas is only served by a single trunk line system, which was put in operation on the morning of April 18, 1925, handling Big Lake crude to Comyn, thence to the Gulf Coast. Humble originally built a single eight-inch, but this has since been doubled, while an extension made up of eight and 10-inch line was built in 1926 from the Kemper station, near Big Lake to McCamey, Upton County, with six-inch gathering lines extending through the Independent-Taylor, Gulf-McElroy and Church & Fields area.

The oil produced in West Texas above the capacity of Humble's trunk line, which is rated at 40,000 barrels daily, is stored in the field, or shipped out in tank cars over racks operated by Humble, Texas, Roxana, Rio Grande Oil Company and the Southern Crude Oil Purchasing Company. The Col-Tex refinery at Colorado takes all of the Mitchell County production, and a part of the Howard County output. Simms Oil Company is taking the Noodle Creek production in tank cars.

New Sabine Parish Producer Holds Flow Over 300 Barrels During Last Week

Shreveport, La.—The Arkanass Fuel Oil Company's discovery well, in section 33-10-12, near Pleasant Hill, Sabine Parish, ranged from 300 to 375 barrels per day last week. A string of three-inch tubing was set on a packer on Saturday, resulting in a slight increase in the flow. It is said that it gauged 325 barrels Sunday. The Arkansas company has made a location for Logan No. 2, at a point near the southeast corner of the southwest quarter of the southeast quarter of section 28-10-12, and a derrick has been built for a third well to be drilled in the northwest corner of the northwest quarter of the northeast quarter of section 33-10-12, one location west of the discovery well.

The Pleasant Hill boom is now in the trading phase, from which it may not emerge until another well is completed. The Phillips, Louisiana, and other companies are said to have made extensive purchases since the Logan well came in, and papers covering a number of close-in tracts have been placed in escrow, pending examination of titles. The Logan Oil Company, owner of the land on which the discovery well is located, has inserted advertisement in the local newspapers, seeking to dispose of its remaining acreage in the vicinity, said to total 4000 acres.

The Gulf Refining Company's Tyson well No. 12, which was completed about seven months ago with an initial production of 42 million cubic feet of gas per day, started flowing oil about a week ago. Its fluid production has increased, day by day, until it is making in excess of 100 barrels of 48 degree oil. It is located in section 14-21-15, of the Pine Island District, Caddo Parish.

Plain Dealing

The area lying northeast of Plain Dealing, in township 23-12, of Bossier Parish, is receiving considerable attention, as excitement subsides at Pleasant Hill. Woodley & Collins, of Shreveport, who drilled two very interesting tests there during 1926, are coring in the Blossom sand in their L. & A. Oil Company No. 2, in section 14-23-12. It will be remembered that their first well showed oil, and that their second test came in as a large gasser, both from the Woodbine sand.

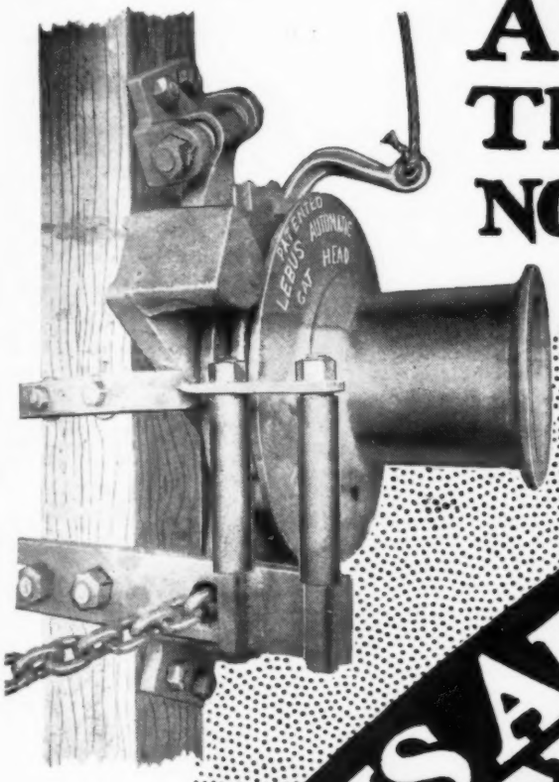
The Palmer Corporation is drilling at 2375 feet in their Colvin No. 1, in section 33-17-6e, of Richland Parish, having as yet failed to find the sand which yielded gas at a shallower level in the Gulf Refining Company's discovery gasser. The Louisiana Petroleum Company is drilling at 2310 feet in its Binion No. 1, in section 22, of the same township. Sam Hunter is fishing for a bit in his Seibert well, in section 1-16-5e. A test made last week at a depth of 2378 feet yielded a small showing of gas, after which drilling was continued until a twist-off occurred at 2381 feet.

A well drilled by Snapp and associates on property owned by the Lanier Oil & Gas Company in section 7-11-11, De Soto Parish, was tested last week at 2762 feet. It is making around one million cubic feet of gas, accompanied by about 15 barrels of salt water.

Arkansas

Arkansas operators are still devoting close attention to the Urbana-Lawson territory, in Union County. The Marine Oil Company's Winn well, in section 11-18-13, was brought in last week with an initial volume of 50 million cubic feet of gas per day from two feet of sand at a total depth of 2711 feet. It made so much sand that it was deemed advisable to close it in, after it had blown for about 30 minutes. The Superior Oil Company's Cordell well, in section 5 of the same township, is making about 25 barrels of oil, accompanied by a large volume of salt water, from a total depth of 2984 feet. The Simms Oil Company has about 800 feet of fluid in its Ballard well, in section 9, of which about 650 feet is said to be oil testing 27 degrees. A sand pump is being run, in an effort to clean out the hole.

ALWAYS WAS THE *BEST!* NOW IT'S EVEN *BETTER!*



LEBUS AUTOMATIC CATHEAD

NEW 1927 MODEL Z TYPE B

Made with less Parts

Positive and Perfect in Operation

Write for Literature

LE BUS PATENTED OIL WELL TOOLS

- LEBUS Automatic Cathead
- LEBUS Slipsocket Overshot
- LEBUS Eureka Tongs
- LEBUS Breakdown Post
- LEBUS Bottom Hole Plug
- LEBUS Outside Drill Pipe Cutter
- LEBUS Inside Pipe or Casing Cutter

AT YOUR DEALERS

MANUFACTURED BY THE

LE BUS ROTARY TOOL WORKS

ELECTRA, TEXAS

Export Agents, Acme Well Supply Co., Inc., 136 Liberty Street, New York City, N Y.

CRUDE OIL PRICE QUOTATIONS

Crude Price Changes

Houston, Texas—Effective at the opening of the market on February 10, The Texas Company posted a flat price of $1.15 per barrel on Markham, Texas, (gulf coast) crude.

February 11.—Effective at the opening of the market today, Atlantic Oil Producing Company added two grades to the gravity posting at Stephens, Arkansas. These two grades were 31 to 31.9, $1.55, and 32 and above, $1.60.

Current Postings

EASTERN STATES

	Feb. 16 1927
New York Transit	$3.30
Bradford District	3.40
National Transit	3.30
Southwest	3.30
Eureka	3.25
Buckeye	3.10
Macksburg	3.05
Gaines	2.85
Somerset	2.20
Cabell	2.10
Ragland	.95
Corning	2.25
Keister	1.80

CENTRAL STATES

Illinois	2.10
Indiana	1.98
Lima	2.21
Plymouth	1.63
Princeton	2.10
Waterloo	1.35
Wooster	2.25

WESTERN KENTUCKY

Posted by Stoll Refining Company for crude from Allen, Warren, Franklin, Davies, Barren, Cumberland and Monroe Counties

All grades	2.20

MID-CONTINENT

Prairie, Sinclair, Gulf, Texas and Magnolia

	Feb. 16 1927
Below 28 (Magnolia only)	1.30
28 to 28.9 gravity	1.50
29 to 29.9 gravity	1.55
30 to 30.9 gravity	1.60
31 to 31.9 gravity	1.65
32 to 32.9 gravity	1.70
33 to 33.9 gravity	1.75
34 to 34.9 gravity	1.80
35 to 35.9 gravity	1.85
36 to 36.9 gravity	1.90
37 to 37.9 gravity	1.95
38 to 38.9 gravity	2.00
39 to 39.9 gravity	2.05
40 to 40.9 gravity	2.10
41 to 41.9 gravity	2.15
42 to 42.9 gravity	2.20
43 to 43.9 gravity	2.25
44 to 44.9 gravity	2.30
45 to 45.9 gravity	2.35
46 to 46.9 gravity	2.40
47 to 47.9 gravity	2.45
48 to 48.9 gravity	2.50
49 to 49.9 gravity	2.55
50 to 50.9 gravity	2.60
51 to 51.9 gravity	2.65
52 and above	2.70

NORTH AND CENTRAL TEXAS

Ranger, North Texas, Mexia, Powell, Richland, Wortham, Lytton Springs, Currie, Moran, Somerset, Big Lake and Nocona crude

Humble O. & R. Co.* and Texas Co.

Below 28**	1.40
28 to 28.9 gravity	1.50
29 to 29.9 gravity	1.55
30 to 30.9 gravity	1.60
31 to 31.9 gravity	1.65
32 to 32.9 gravity	1.70
33 to 33.9 gravity	1.75
34 to 34.9 gravity	1.80
35 to 35.9 gravity	1.85
36 to 36.9 gravity	1.90
37 to 37.9 gravity	1.95
38 to 38.9 gravity	2.00
39 to 39.9 gravity	2.05
40 to 40.9 gravity	2.10
41 to 41.9 gravity	2.15
42 to 42.9 gravity	2.20
43 to 43.9 gravity	2.25
44 to 44.9 gravity	2.30
45 to 45.9 gravity	2.35
46 to 46.9 gravity	2.40
47 to 47.9 gravity	2.45
48 to 48.9 gravity	2.50
49 to 49.9 gravity	2.55
50 to 50.9 gravity	2.60
51 to 51.9 gravity	2.65
52 and above	2.70

Corsicana Heavy $1.25 per barrel, posted by Magnolia.

*Until further notice, Ranger, North Texas, Mexia, Powell, Richland, Wortham, Lytt Springs, Currie, Moran and Nocona crudes purchased by the Humble Oil and Refining Company, of a gravity lower than 28 degrees will be paid for with a corresponding decrease of five (5) cents per barrel for each lower degree of gravity.

**Humble does not post on below 28.

SOUTH TEXAS

	Feb. 16 1927
Mirando	1.21

SOMERSET
Grayburg and Pioneer

28 to 28.9	1.25
29 to 29.9	1.30
30 to 30.9	1.36
31 to 31.9	1.54
32 to 32.9	1.62
33 to 33.9	1.70
34 to 34.9	1.78
35 to 35.9	1.86
36 to 36.9	1.94
37 to 37.9	2.02
38 and up	2.10

GULF COAST

Grade "A" all companies	1.40
Grade "B"	1.40
Gulf Coast Light Oil, Below 25	1.40
25 to 25.9	1.45
26 to 26.9	1.50
27 to 27.9	1.55
28 to 28.9	1.60
29 to 29.9	1.65
30 to 30.9	1.70
31 to 31.9	1.75
32 to 32.9	1.80
33 to 33.9	1.85
34 to 34.9	1.90
35 to 35.9	1.95
36 to 36.9	2.00
37 to 37.9	2.05
38 to 38.9	2.10
39 to 39.9	2.15
40 and above	2.20

*Humble Oil and Refining Company's postings on Gulf Coast Light stop at 35 to 35.9. Its price on all crude above 35 is $1.95 per barrel

Magnolia Petroleum Company's posting stop at 31 to 31.9.

MARKHAM
The Texas Company

All grades	1.15

(Continued on page 164)

California Crude Oil Prices at the Well

Following are the current prices offered by Standard Oil Company for crude oil at the well: (Price per barrel of 42 gallons in fields indicated)

Gravity (degrees)	Signal Hill	Huntington Beach	Inglewood	Olinda-Brea Canon	Rosecrans Dominguez	Torrance	Richfield	Whittier	La Habra	Montebello	Coyote Hills	Santa Fe Springs	Newhall	Midway-Sunset Elk Hills	McKittrick	Lost Hills	Coalinga	Kern River	Wheeler Ridge
14-14.9	$ .85	$ .85	$ .85	$ .85	$ ..	$ .85	$ .85	$ .85	$ .85	$ .85	$ .85	$ ..	$ .75	$ .75	$ .75	$ .75	$ .75	$ .75	$ .75
15-15.9	.87	.87	.87	.87	..	.87	.87	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75	.75
16-16.9	.90	.90	.90	.90	..	.90	.90	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75	.75
17-17.9	.94	.94	.94	.94	..	.94	.94	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75	.75
18-18.9	.98	.98	.98	98	..	.98	.98	.86	.86	.86	.86	..	.75	.75	.75	.75	.75	.75	.75
19-19.9	1.04	1.04	1.04	1.04	..	1.04	1.04	.87	.87	.87	.87	..	.75	.75	.75	.75	.75	.75	.75
20-20.9	1.10	1.10	1.10	1.10	..	1.10	1.10	.89	.89	.89	.90	..	..	.82	..	.82	.79	..	.79
21-21.9	1.16	1.16	1.16	1.16	..	1.16	1.16	.91	.91	.91	.98	..	..	.90	..	.90	.86	..	.81
22-22.9	1.22	1.22	1.22	1.22	..	1.22	1.22	.94	.94	.94	1.06	..	..	1.00	..	1.00	.93	..	.85
23-23.9	1.28	1.28	1.28	1.28	..	1.28	1.28	..	..	.97	1.14	..	..	1.11	..	1.11	1.00	..	.89
24-24.9	1.34	1.34	1.34	1.34	1.34	1.34	1.34	..	..	1.01	1.22	1.02	..	1.22	..	1.22	1.07	..	.93
25-25.9	1.40	1.40	1.40	1.40	1.40	1.40	1.40	..	..	1.05	1.30	1.08	..	1.33	..	1.33	1.14	..	.97
26-26.9	1.46	1.46	1.46	1.46	1.46	1.46	1.46	..	..	1.09	1.38	1.16	..	1.44	..	1.44	1.21	..	1.01
27-27.9	1.52	1.52	1.52	1.52	1.52	1.52	1.52	..	..	1.13	1.46	1.24	..	1.55	..	1.55	1.28	..	1.05
28-28.9	1.58	1.58	1.58	1.58	1.58	1.58	1.58	..	..	1.17	1.54	1.32	..	1.66	..	1.66	1.35	..	..
29-29.9	1.64	1.64	..	1.64	1.64	..	1.64	..	..	1.21	1.62	1.40	..	1.77	..	1.77	1.42	..	..
30-30.9	1.70	1.70	..	1.70	1.70	..	1.70	..	..	1.25	1.70	1.48	..	1.88	..	1.88	1.49	..	..
31-31.9	1.76	1.76	..	..	1.76	..	..	..	..	..	..	1.60	..	1.99	..	1.99	1.56	..	..
32-32.9	1.84	1.84	..	..	1.84	..	..	..	..	..	..	1.72	..	2.10	..	2.10	1.63	..	..
33-33.9	..	..	..	..	1.92	..	..	..	..	..	..	1.84	..	2.21	..	2.21	1.70	..	..
34-34.9	..	..	..	.	2.00	..	..	..	..	..	..	1.96	..	..	..	2.32	1.77	..	..
35-35.9	..	..	..	..	2.08	..	..	..	..	..	..	2.08	..	..	..	..	1.84	..	..
36-36.9	..	..	..	..	2.16	..	..	..	..	..	..	2.16	..	..	..	..	..	..	..
37-37.9	..	..	..	..	2.24	..	..	..	..	..	..	2.24	..	..	..	..	..	..	..
38-38.9	..	..	..	..	2.34	..	..	..	..	..	..	2.31	..	..	..	..	..	..	..
39-39.9	..	..	..	..	2.44	..	..	..	..	..	..	2.44	..	..	..	..	..	..	..
40-40.9	..	..	..	..	2.54	..	..	..	.	..	..	..	..	..	..	..	..	..	..
41-41.9	..	..	..	..	2.64	..	..	..	.	..	..	..	..	..	..	..	..	..	..
42-42.9	..	..	..	..	2.74	..	..	..		..	..	..	..	..	..	..	..	..	..

WAR on WASTE!

THE Sinclair Law of Lubrication is a valued sales help to the Sinclair dealer in building his business. He is not merely selling "oil"—he is selling correct lubrication and economical transportation. He is increasing his gallonage by doing a worthwhile part in the "War on Waste"—that waste of expensive machinery which is caused by faulty lubrication.

SINCLAIR REFINING COMPANY
45 Nassau Street, New York
Atlanta Detroit Kansas City Chicago Houston Omaha

The SINCLAIR LAW of LUBRICATION

For every machine
of every degree
of wear *there is*
a scientific
SINCLAIR OIL
to suit *its* speed
and seal *its* power

SINCLAIR OILS
REG. U.S. PAT. OFF.

SINCLAIR **OPALINE** MOTOR OIL
REG. U. S. PAT. OFF.

ENTIRE CONTENTS COPYRIGHTED, 1926, BY SINCLAIR REFINING CO.

LULING

	Feb. 16 1927
Based on Contract	1.30

TEXAS PANHANDLE

Magnolia Petroleum Company

Hutchinson, Carson and Gray counties, all grades	1.25

Humble Oil & Refining Company

Hutchinson and Carson Counties, all grades	1.25

Gray County

28 to 28.9 gravity	1.00
29 to 29.9	1.05
30 to 30.9	1.10
31 to 31.9	1.15
32 to 32.9	1.20
33 to 33.9	1.25
34 to 34.9	1.30
35 to 35.9	1.35
36 to 36.9	1.40
37 to 37.9	1.45
38 to 38.9	1.50
39 to 39.9	1.55
40 to 40.9	1.60
41 to 41.9	1.65
42 to 42.9	1.70
43 to 43.9	1.75
44 and above	1.80

Crane-Upton-Crockett Counties

Below 26 gravity	.80
26 to 26.9	.85
27 to 27.9	.90
28 to 28.9	.95
29 to 29.9	1.00
30 to 30.9	1.05
31 to 31.9	1.10
32 to 32.9	1.15
33 to 33.9	1.20
34 to 34.9	1.25
35 to 35.9	1.30
36 and above	1.35

Wheeler County
(Humble Oil and Refining Company)

28 to 28.9 gravity	.90
29 to 29.9	.95
30 to 30.9	1.00
31 to 31.9	1.05
32 to 32.9	1.10
33 to 33.9	1.15
34 to 34.9	1.20
35 to 35.9	1.25
36 to 36.9	1.30
37 to 37.9	1.35
38 to 38.9	1.40
39 to 39.9	1.45
40 to 40.9	1.50
41 to 41.9	1.55
42 to 42.9	1.60
43 to 43.9	1.65
44 and above	1.70

Crane-Upton Counties
Kay County Gas Company

Below 26 gravity	.80
26 to 26.9	.85
27 to 27.9	.90
28 to 28.9	.95
29 to 29.9	1.00
30 to 30.9	1.05
31 to 31.9	1.10
32 to 32.9	1.15
33 to 33.9	1.20
34 to 34.9	1.25
35 to 35.9	1.30
36 and above	1.35

Kay County Gas Company and Gulf Pipe Line Company

Hutchinson and Carson Counties, All grades	$1.25

WYOMING-MONTANA

Wyoming

Byron	2.00
Ferris	1.80
Elk Basin	2.00
Grass Creek	2.00
Rock Creek	1.85
Lost Soldier	1.35
Lance Creek	2.00
Mule Creek	1.45
Notches	6[illegible]
Big Muddy	1.85
Osage	2.00
Hamilton Dome	.85
Pilot Butte	1.75
Torchlight-Greybull	2.00
Lander	1.00

Salt Creek
(Midwest Refining Company)

29 to 29.9 gravity	1.55
30 to 30.9 gravity	1.60

	Feb. 16 1927
31 to 31.9 gravity	1.65
32 to 32.9 gravity	1.70
33 to 33.9 gravity	1.75
34 to 34.9 gravity	1.80
35 to 35.9 gravity	1.85
36 to 36.9 gravity	1.90
37 to 37.9 gravity	1.95

Montana

Sunburst	1.35
Cat Creek	2.40

NEW MEXICO

Artesia	1.65
Hogback	2.45

CANADIAN CRUDE

Oil Springs	2.68
Petrolia	2.61

*Bounty on Canadian crude is ¾ cent per gallon, or 26¼ cents per barrel

LOUISIANA-ARKANSAS

(Louisiana Oil Refining Company, Gulf Refining Company of Louisiana and The Texas Co.) Homer, Haynesville, Caddo, El Dorado, De Soto and Chrichton.

Below 28 gravity	1.40
28 to 28.9	1.50
29 to 29.9	1.55
30 to 30.9	1.60
31 to 31.9	1.65
32 to 32.9	1.70
33 to 33.9	1.75
34 to 34.9	1.80
35 to 35.9	1.85
36 to 36.9	1.90
37 to 37.9	1.95
38 to 38.9	2.00
39 to 39.9	2.05
40 to 40.9	2.10
41 to 41.9	2.15
42 to 42.9	2.20
43 to 43.9	2.25
44 to 44.9	2.30

	Feb. 16 1927
45 to 45.9	2.35
46 to 46.9	2.40
47 to 47.9	2.45
48 to 48.9	2.50
49 to 49.9	2.55
50 to 50.9	2.60
51 to 51.9	2.65
52 and above	2.70

Atlantic Oil Producing Company posts this same schedule on Homer, Haynesville, and West El Dorado.

Magnolia Petroleum Company has the same posting on Pine Island, Haynesville, Bull Bayou and El Dorado.

STEPHENS

Louisiana Oil Refining Company, Gulf Refining Company of Louisiana

Below 28	1.30
28 to 28.9	1.40
29 to 29.9	1.45
30 and above	1.50

Atlantic Oil Producing Company

Below 28	1.30
28 to 28.9	1.40
29 to 29.9	1.45
30 to 30.9	1.50
31 to 31.9	1.55
32 and above	1.60

SMACKOVER

(All companies)

27 and above	1.50
26 to 26.9	1.45
25 to 25.9	1.40
24 to 24.9	1.35
Below 24 gravity	1.10
Bellevue	1.40
Jennings	1.15
Vinton	1.50
Edgerly	1.50
Urania	1.10
Cotton Valley	1.20
Calion	1.10

IMPORTS OF PETROLEUM AT PRINCIPAL UNITED STATES PORTS

(American Petroleum Institute Figures. Barrels of 42 gallons)

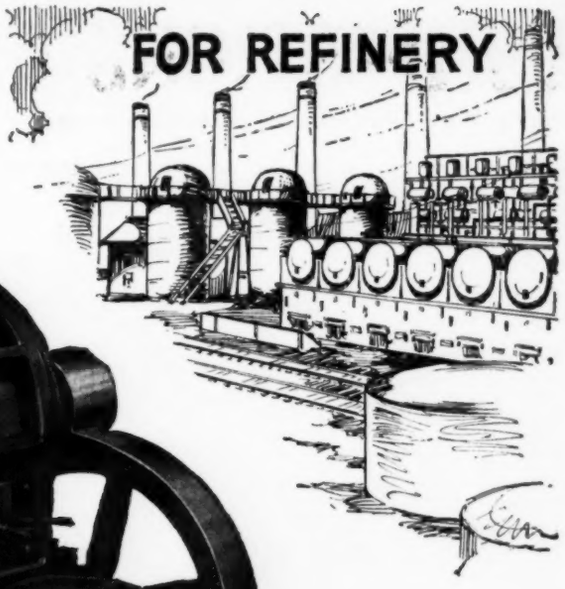
	Total Month January	Total Month December	Week Ended Feb. 5	Week Ended Jan. 29
AT ATLANTIC COAST PORTS—				
Baltimore	497,000	387,000	.....	175,000
Boston	255,000	329,000	130,000	65,000
New York	1,996,000	1,740,000	311,000	394,000
Philadelphia	126,000	231,000	76,000	.....
Others	963,000	746,000	126,000	298,000
Total	3,837,000	3,433,000	643,000	932,000
Daily average	123,774	110,742	91,857	133,143
AT GULF COAST PORTS—				
Galveston District	245,000	389,000	80,000	.....
New Orleans and Baton Rouge	1,352,000	1,263,000	440,000	426,000
Port Arthur and Sabine District	.....	90,000	.....	.....
Tampa	128,000	336,000	.....	.....
Total	1,725,000	2,078,000	520,000	426,000
Daily average	55,645	67,032	74,286	60,857
AT ALL U. S. PORTS—				
Total	5,562,000	5,511,000	1,163,000	1,358,000
Daily average	179,419	177,774	166,143	194,000

RECEIPTS OF CALIFORNIA OIL AT ATLANTIC AND GULF COAST PORTS

(American Petroleum Institute Figures. Barrels of 42 gallons)

	Total Month January	Total Month December	Week Ended Feb. 5	Week Ended Jan. 29
AT ATLANTIC COAST PORTS—				
Baltimore	158,000	423,000	254,000	.....
Boston	256,000	221,000	.....	.....
New York	815,000	1,229,000	398,000	80,000
Philadelphia	493,000	230,000	185,000	*235,000
Others	459,000	303,000	489,000	75,000
Total	2,181,000	2,406,000	1,326,000	390,000
Daily ave age	70,355	77,613	189,429	55,714
AT GULF COAST PORTS—				
Tampa	25,000	.....	.....	.....
Daily average	806	.....	.....	.....
Total Atlantic and Gulf Coast Ports	2,206,000	2,406,000	1,326,000	390,000
Daily average	71,161	77,613	189,429	55,714
DISTRIBUTION OF TOTAL CALIFORNIA OIL RECEIPTS IS AS FOLLOWS:				
Crude	355,000	695,000	357,000	80,000
Gasoline	720,000	622,000	403,000	80,000
Gas Oil	230,000	695,000	75,000	.....
Fuel Oil	843,000	394,000	433,000	230,000
Lubricating	58,000	.....	58,000	.....
Total	2,206,000	2,406,000	1,326,000	390,000

*Revised.



No More Daily Oiling!

Patent Applied For

OIL THIS PUMP ONCE A MONTH

Do you realize how much time and energy it takes to carefully oil a pump every day? Every GARDNER Self-Lubricating Pump installed saves you, thereafter several days of labor each month.

Furthermore you KNOW the pump is always thoroughly oiled. No bearings overlooked. This means few replacements and long life.

All types of power pumps are offered in this style. Ask for Bulletins EP-1 and EP-2.

Territory Available for Agents.

"Quality Builders for More Than 65 Years"

THE GARDNER GOVERNOR CO.

Quincy, Illinois

CHICAGO 549 Washington Blvd.	NEW YORK 534 Singer Bldg.	PHILADELPHIA 604 Arch Street	MUSKOGEE 323 Dayton Street	DALLAS 2515 Maple Street
SHREVEPORT 561 Rutherford Street	HOUSTON 1242 Heights Blvd.	SAN FRANCISCO 401 Rialto Bldg.	LOS ANGELES 684 Santa Fe Ave.	LONDON 25 Bishopsgate, E. C. 2

Oil Industry Distributors:

Atlas Supply Co., Muskogee, Tulsa and Fort Worth.

Kirk W. Eickelberger, Rialto Bldg., San Francisco.

Emsco Derrick & Equipment Co., 67th and Alameda Sts., Los Angeles.

Haywood Williamson Co., Shreveport.

International Supply Co., Stores in All Fields.

F. W. Heitman Co., Houston.

Norvell-Wilder Hardware Co., Houston, Beaumont and Shreveport.

Republic Supply Co., Los Angeles.

GARDNER GOVERNORS PUMPS · COMPRESSORS

GARDNER

Say you saw it in The OIL WEEKLY

COMPLETIONS FOR PAST WEEK IN U.S. FIELDS

Summarized Review of Field Results

State—	Completions This Week	Completions Last Week	Producers This Week	Producers Last Week	Gas Wells This Week	Gas Wells Last Week	Failures This Week	Failures Last Week	Initial Production This Week	Initial Production Last Week
Arkansas	3	9	2	6	..	1	1	2	255	240
California	14	18	13	17	..	..	1	1	4991	9214
Colorado	..	1	..	1	..	..	..	..	....	40
Indiana	..	4	..	3	..	..	..	1	....	110
Illinois	..	2	..	2	..	..	..	..	....	45
Kansas	28	22	13	10	2	2	13	10	1855	1270
Kentucky	31	29	24	19	1	2	6	8	1031	633
Louisiana	22	15	13	11	4	..	5	4	3459	1176
Michigan	5	5	3	5	..	..	2	..	45	130
Mississippi	..	..	..	..	..	..	..	..	....	....
Montana	..	5	..	5	..	..	..	..	....	....
New York	38	..	15	..	17	..	6	..	142	460
New Mexico	2	1	2	..	..	..	..	1	1100	....
Ohio	35	39	21	20	10	13	4	6	558	1482
Oklahoma	87	64	46	55	10	2	31	7	35,586	28,356
Pennsylvania	59	16	48	3	8	10	3	3	199	15
Tennessee	..	..	..	..	..	..	..	..	....	....
Texas	145	143	91	97	..	1	54	45	22,054	24,110
West Virginia	..	40	..	10	..	27	..	3	....	89
Wyoming	2	2	2	..	..	1	..	1	2250	....
Totals	471	415	293	264	52	59	126	92	73,525	67.370
Increase this week	56	..	29	..	..	..	34	..	6,155	....
Decrease this week	..	..	..	..	7	..	..	..	....	....

Texas

ARCHER COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Bridwell-Heydrick Oil Co.'s Abercrombie-Taylor 11-A	*	1366
L. T. Burns et al's Turbeville 2-D	135	1461
Turbeville 3-D	170	1460
Christie & Maddox's Fish 1	*	1505
Golding-Cochran & Cline's Prideaux 11	50	675
Humble Oil & Ref. Co.'s Parrish 1-C	*	1538
Humble et al's Hutcheson 1	*	1450
Madden & Hunt's Love 1	*	1405
Marland Oil Co.'s Turbeville 17	450	1490
Marland-Bass & Dillard's Perkins 3	*	1767
Mid-Kansas Oil & Gas Co.'s Lowe 6	*	1303
Pandem Oil Corp.'s L. L. Hudson 8	15	1154
Thomas 10	13	1167
Thomas 11	*	1189
Perkins & Cullum's Perkins 1	*	1640
Roxana Pet. Corp.'s Abercrombie-Taylor 14-A	55	1358
Lee Wilson et al's Bohac 1	*	1500
Wilson & Russell's Prideaux 4	70	683

BIG LAKE

Big Lake Oil Co.'s University 80	800	2879

BROWN COUNTY

Amerada Pet. Corp.'s J. H. Fry 18	1025	1321
Gibson Oil Corp.'s White 4	40	1244
Halloran et al's Eddington 3	*	1549
Humble Oil & Ref. Co.'s Hodnett 3-B	*	1275
Inland Oil Co.'s Crathers 1	*	1710
Mitcham et al's Weedon 1	*	1608
Morris et al's Smith 2	*	1200
Prairie Oil & Gas Co.'s Armstrong 4	*	1472
Roxana Pet. Corp.'s Newton 4	565	1283
Sawyer et al's White 5	*	1785
O. H. Shoup, Jr., et al's John Byler 1	150	1309
Sorrells et al's Martin 1	*	1602
Williamson et al's Keeler 11	10	1163

BURKBURNETT

Magnolia Pet. Co.'s C. F. Collins 10	*	1780
C. P. Sheldon et al's Obenhaus 2	85	1666
West et al's Foster-Allen 1	*	2108

CALLAHAN COUNTY

Prairie Oil & Gas Co.'s Cunningham 11	10	1402

CARSON COUNTY

Champlin Ref. Co. et al's E. F. Bryan 1	250	3210
Roxana Pet. Corp.'s E. F. Bryan 2-D	240	3230
Southwestern Oil & Dev. Co.'s C. Garner 1, shot twice	25	3183

COLEMAN COUNTY

Magnolia Pet. Co.'s J. P. Morris 17	*	3665

COOKE COUNTY

American Ref. Co.'s J. A. Dennis 6	45	1276
Eggar et al's Marshall 1	*	2501
J. K. Hughes Dev. Co.'s Embry 1	20	1209
Jeffers & Jeffers' Williams 1	*	1761
F. E. Skinner et al's Brown-Blanton 1	*	1793

EASTLAND COUNTY

Vacuum Oil Co.'s Compton 1	*	1835

ELECTRA

Eureka Prod. Co.'s Waggoner 14	30	1477
Wayne Hammon et al's Waggoner 9-B	5	491
Waggoner 10-B	*	500
Joe Howell et al's Burnett 1-B	*	1850
J. C. Jennings et al's Jennings 2	*	1850
Magnolia Pet. Co.'s Waggoner 11-A	10	1757
S. L. Honaker 73	*	1470
W. M. Moore et al's Burnett 2	15	1612

GRAY COUNTY

Humble Oil & Ref. Co.'s W. W. Merten 5, shot	30	3227
Prairie-Shamrock Pet. Co. et al's Merten 7-A, shot	180	3181

HOWARD COUNTY

Marland Oil Co.'s Otis Chalk 8	70	1638

HUTCHINSON COUNTY

Black Diamond Oil Co.'s Smith 1, shot twice	25	2854
J. H. Middleton et al's Smith 1, shot	80	2890
Mid-West Exploration Co.'s J. A. Whittenburg 1, shot	125	3030
Phillips Pet. Co.'s Johnson-Florence 2, shot	200	2912
Prairie & Phillips Pet. Co.'s Johnson 9-B, shot	200	2912

JACK COUNTY

Buttram et. Corp.'s C. K. Cullers 4	125	2100
M. Cullers 1	*	2125
Sampley 1	30	2061
White Bors. et al's Smith 1	8	2362

JONES COUNTY

Mid-West Exploration Co.'s Thornton 2	500	2515

K-M-A- AND IOWA PARK

Bridwell-Heydrick Oil Co.'s Griffin 1	140	1823
Continental Oil Co. and Pet. Prod. Co.'s Love 1	*	1824
Holman Cook & Roy Reeder's Overby 3	15	688
Cooper & McLaughlin's Love 2	115	1817
Petroleum Prod. Co.'s Love (Deep) 2-B	*	1985
Love (Shallow) 4-B	30	497
Tom & Pat White's Mitchell 7-B	*	1895

MITCHELL COUNTY

Magnolia Pet. Co.'s Mary Foster 3	150	2875

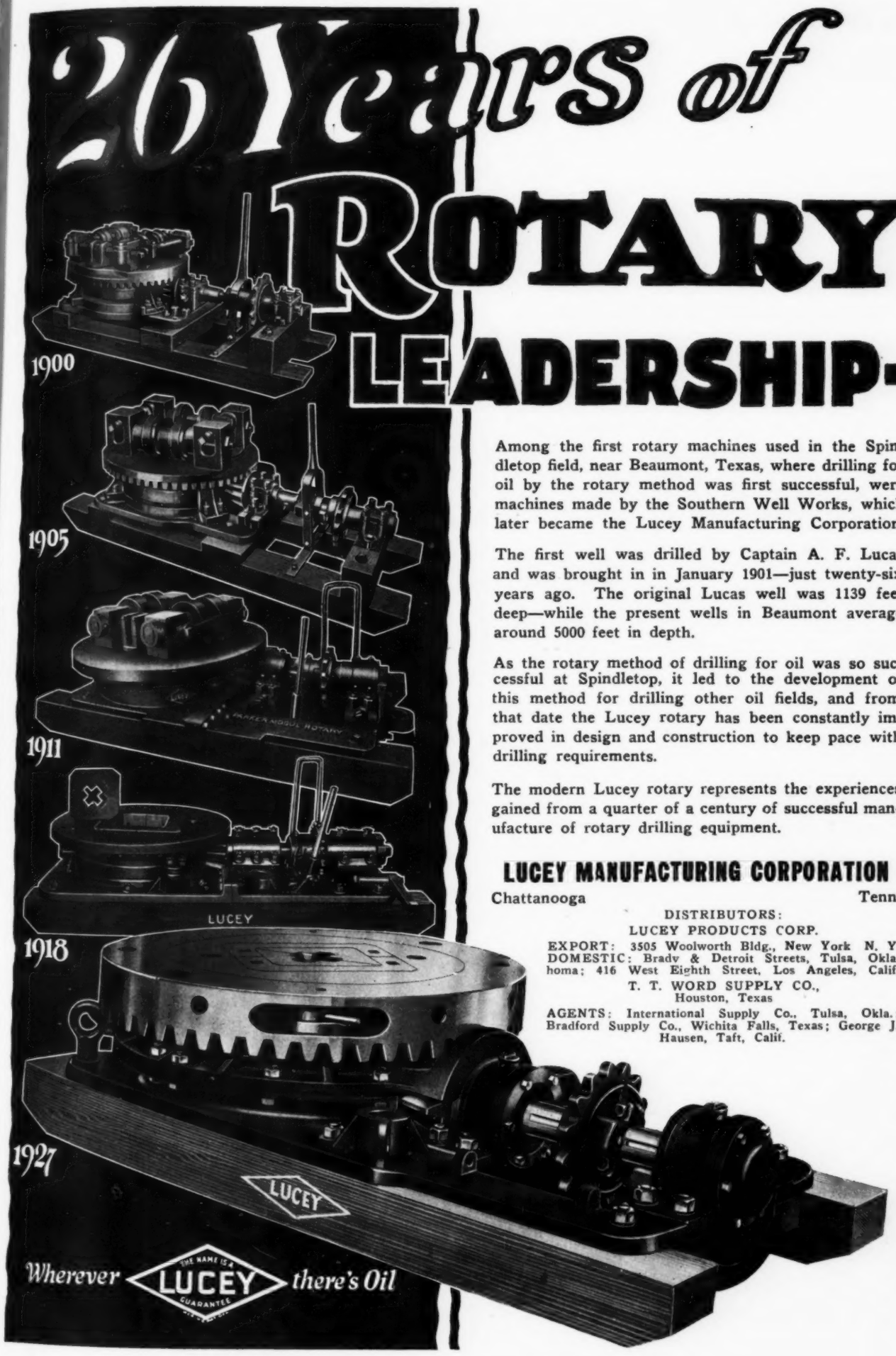
MONTAGUE COUNTY

Cato Oil Co.'s Rolls 9	25	875
Continental Oil Co.'s Howard 12-A	50	1006
N. J. Howard 20	20	1376
N. J. Howard 21	25	1374
Maddox 12-A	40	954
Humble O. & R. Co.'s Howard 3	75	1165
Maddox 13	40	873
McMan O. & G. Co.'s Cunningham 1	*	2230
Perkins et al's Salmon 2	20	912
Pure Oil Co.'s Maddox 5-B	40	912
Maddox 6-B	35	898
Rowland 6-B	95	1135
The Texas Co.'s Martin 5	25	1172

MEXIA

Magnolia Pet. Co.'s Thompson 6-A	75	3148

26 Years of ROTARY LEADERSHIP-



Among the first rotary machines used in the Spindletop field, near Beaumont, Texas, where drilling for oil by the rotary method was first successful, were machines made by the Southern Well Works, which later became the Lucey Manufacturing Corporation.

The first well was drilled by Captain A. F. Lucas and was brought in in January 1901—just twenty-six years ago. The original Lucas well was 1139 feet deep—while the present wells in Beaumont average around 5000 feet in depth.

As the rotary method of drilling for oil was so successful at Spindletop, it led to the development of this method for drilling other oil fields, and from that date the Lucey rotary has been constantly improved in design and construction to keep pace with drilling requirements.

The modern Lucey rotary represents the experiences gained from a quarter of a century of successful manufacture of rotary drilling equipment.

LUCEY MANUFACTURING CORPORATION

Chattanooga Tenn.

DISTRIBUTORS:
LUCEY PRODUCTS CORP.
EXPORT: 3505 Woolworth Bldg., New York N. Y.
DOMESTIC: Brady & Detroit Streets, Tulsa, Oklahoma; 416 West Eighth Street, Los Angeles, Calif.
T. T. WORD SUPPLY CO.,
Houston, Texas
AGENTS: International Supply Co., Tulsa, Okla.; Bradford Supply Co., Wichita Falls, Texas; George J. Hausen, Taft, Calif.

Wherever THE NAME IS A LUCEY GUARANTEE *there's Oil*

PALO PINTO COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Terrell & Morrissey's Hinkson 1....	*	1520

SHACKELFORD COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Hope Pet. Co.'s Reynolds 1-B	†	680
Milham Corp.'s Moore 3	15	2150
Roeser-Pendleton & Marland Oil Co.'s W. I. Cook 22-A (Sec. 60)	800	1258
W. I. Cook 33-A (Sec. 60).....	75	1155
W. I. Cook 29-B (Sec. 60)	*	1356
W. I. Cook 6-C, (Sec. 60).....	40	1143
W. I. Cook 11-C, (Sec. 60).....	30	1144
W. I. Cook 12-C, (Sec. 60).....	50	1133
W. I. Cook 13-C, (Sec. 60).....	35	1149
W. I. Cook 24-A, (Sec. 85).....	25	1351
W. I. Cook 2-B, (Sec. 12).....	100	1289
Simms Oil Co.'s Jones 1	65	865
Tannehill Oil Co.'s Matthews 2 (Sec. 58)	50	1020
White Eagle O. & R. Co.'s Matthews 2	*	950

SOUTH VERNON DISTRICT

Company, Well and Location	Initial Production Bbls.	Depth
Humble O. & R. Co.'s Waggoner 17-H	35	2431
W. T. Waggoner 18-M	170	2379
W. T. Waggoner 19-M.....	140	2398
Phillips Pet. Co.'s Waggoner 5-Y....	15	1862
Waggoner 15-QQ	140	2399
Prairie O. & G. Co.'s Waggoner 6-A	75	2412
Waggoner Ref. Co.'s Waggoner 6-A..	190	2381

STEPHENS COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Mid-Texas Oil Co.'s Cunningham 7..	120	3185

THROCKMORTON COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Red Bank Oil Corp.'s Parrott 5....	*	4187

UPTON COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Dixie Oil Co.'s A. S. Burleson 17..2280		2054
Humble O. & R. Co.'s Burleson 5..		2309
Marland Oil Co.'s M. C. Powell 2..	120	2497
Prairie O. & G. Co.'s J. F. Lane 1.1970		2080
Rio Grande Oil Co.'s W. A. Chaney 1	95	2406
Sun Oil Co.'s Mrs. M. L. Baker 2..	130	2270

YOUNG COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Bashara et al's Marshall 4	30	2854
Hines et al's Hamilton 1	*	1002

GULF COAST COMPLETIONS

Company, Well and Location	Initial Production Bbls.	Depth
Spindle Top—		
Gulf Production Co.'s No. 11 James F. Weed "A"	200	4550
No. 8 James F. Weed "A"	*	5450
New Beaumont Oil Co.'s No. 1 Garrick, wo	*	4050
The Sun Company No. 6 McLean ..371		5200
Goose Creek—		
M. & B. Oil Co.'s No. 3 Scorrega	*	2410
Sour Lake—		
Gulf Production Co.'s No. 3 M. J. Ebberts	*	3800
Minor Oil Company's No. 80 Fee..	12	1026
Hull—		
Republic Production Co.'s No. 46 Dolbear, wo	125	2700
Empire Gas & Fuel Co.'s No. 23 Barngrover	500	3176
Blue Ridge—		
Navarro Oil Co.'s No. 1 Robinson "B" 2000		3660
Pierce Junction—		
Gulf Production Co.'s No. 3 W. H. Jones Fee, wo	60	3550
Mike Kouri No. 1 Jones	*	2810
High Island—		
The Sun Co.'s No. 11 Lockhart ...	*	2150
South Liberty—		
Gulf Production Co.'s No. 1 Marshall	60	3840
No. 1 Archer	650	3810

SOUTH LOUISIANA

Company, Well and Location	Initial Production Bbls.	Depth
Vinton—		
Vinton Petroleum Co.'s No. 5 Rescue, 13 acres	100	2100
Louisiana & Colorado Oil Co.'s No. 3 Johnson	*	2010
Edgerly—		
Rex Petroleum Co.'s No. 4 Hunter	250	4250
Evangeline—		
Port City Oil Co.'s No. 2 S. F. S., wo	10	1850
Lockport—		
Vacuum-Gulf Co.'s No. 12 Miller ..2000		3700

Louisiana

Company, Well and Location	Initial Production Bbls.	Depth
Caddo Parish—		
O. D. Cravath et al's Barker 1 21-22-15	7	1040
Dixie Oil Co.'s Noel C-1, 15-20-15 ..	*	2484
Robertshaw 82, 14-21-15	15	1667
Luby Oil Co.'s Caddo Levee Board 13, 23-22-15	20	1020
The Texas Co.'s Caddo Levee Board 68, 33-21-16	45	1842
Curtis 5, 14-20-15	250	2207
Total, 6 wells	337	
Elm Grove Field, Bossier Parish—		
Gulf Ref. Co.'s Hodges 19, 19-16-11	12	1551
Monroe Gas Field, Morehouse Parish—		
Louisiana Gas Prod. Co.'s Millsap 1, 9-20-5e	¶3¾	2299
Monroe Gas Field, Ouachita Parish—		
New Process Carbon Black Co.'s Louisiana Dev. Co. 1, 36-20-4e ..	¶21	2191
Total, 2 wlels .....¶21¾		
Sarepta-Spring Hill District, Bossier Parish—		
Northwest Louisiana Gas Co.'s Bollinger 3, 38-23-11	¶15	2677
Urania Field, La Salle Parish—		
H. T. Taylor's Urania 5, 19-10-2e..	50	1569
Wingfield et al's Urania 4, 2-9-1e..	700	1506
Total, 2 wells	750	

Arkansas

Company, Well and Location	Initial Production Bbls.	Depth
Smackover Field, Union County—		
Imperial Oil & Gas Co.'s Murphy 9, 9-16-15	150	2435
Lion Oil & Ref. Co.'s Murphy H-3, 9-16-15	105	2436
Total, 2 wells	255	

Mountain States

WYOMING

Company, Well and Location	Initial Production Bbls.	Depth
Lost Soldier—		
Prairie Oil & Gas Co.'s No. 65A, 11-26-90 1525		2174
Maverick Springs—		
Texas Production Co.'s No. 6, 26-6-101	725	1670

NEW MEXICO

Company, Well and Location	Initial Production Bbls.	Depth
Eddy County—		
Williams Petroleum Co.'s No. 15, 17-18-28	100	3170
Rattlesnake—		
Continental Oil Co.'s No. 22, 12-29-19 1000		850

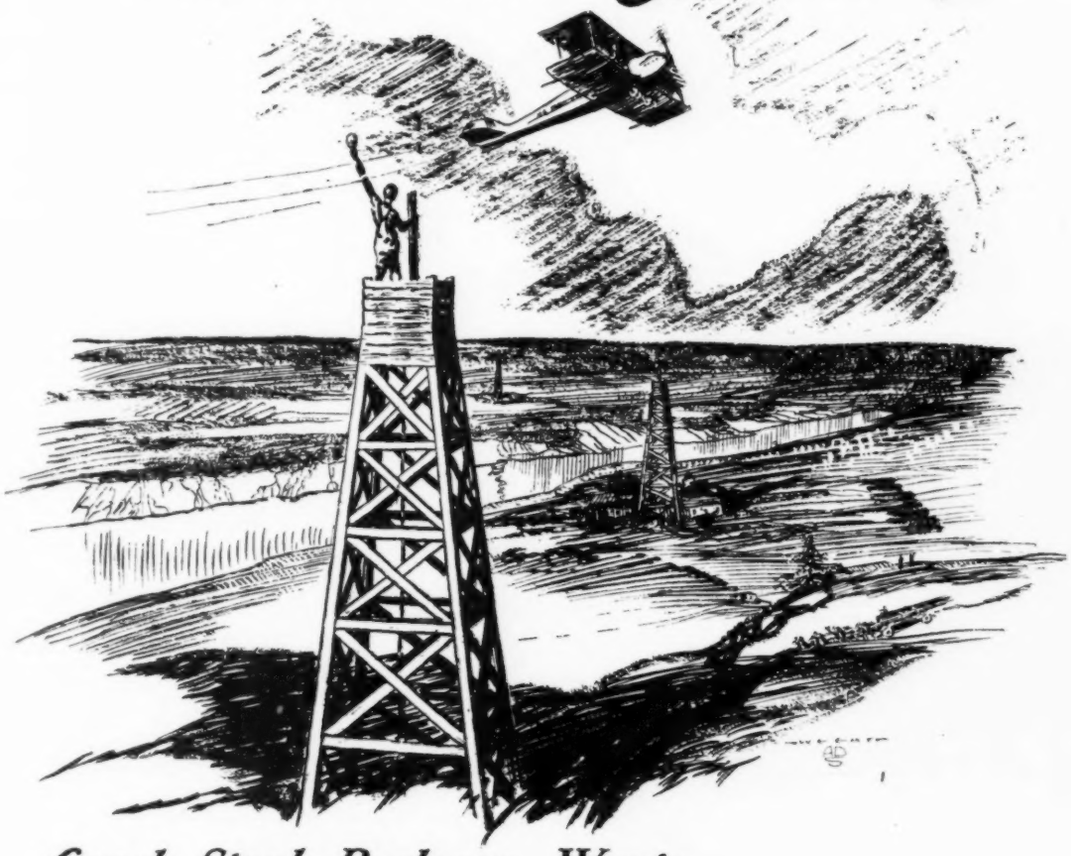
Kansas

Company, Well and Location	Initial Production Bbls.	Depth
Butler County—		
Tidal Oil Co.'s No. 37 Dickinson, NEc NW SW SW 16-26-8	20	2540
T. C. Johnson et al, No. 8 Blakeman SEc NE SW 3-28-6	10	3061
Mid-Kansas Oil & Gas Co.'s No. 4 Blakeman NEc SE SW 3-28-6 ...	80	3060
White Eagle Oil & Ref. Co.'s No. 3 Blakeman, NWc NE SE 4-28-6 ..	10	2724
Phillips Pet. Co.'s No. 1 Hill, SWc SE NE 12-27-7	*	2769
Empire Gas & Fuel Co.'s No. 1 Gray, SWc lot 21, 6-27-8	*	2740
Roger et al's No. 1 Beteman, c SE NW 6-28-7	*	2748
Cowley County—		
Independent Oil & Gas Co.'s No. 2 Swenson, SWc SE 15-32-4	120	2373
Roth & Faurot's No. 1 Townlot, NEc SE NW 22-32-4	¶3	2304
T. B. Slick et al's No. 1 Allbright, SEc SW 17-32-3	*	3546
Elk County—		
Theat Oil Co.'s No. 3 Walker, NEc SW NW SW 26-31-10	15	1661
Greenwood County—		
Sinclair Oil & Gas Co.'s No. 52 Browning, c SW NW 20-22-10...	150	2344
Empire Gas & Fuel Co.'s No. 15 Frommee, Swc NE 14-22-11	30	1917
No. 3 Garth, SEc NE NE 22-22-11	180	1900
The Texas Co.'s No. 3 Swanson, SEc NE 9-22-12	120	1837
The Texas Co. et al's No. 5 Edwards "A" SWc SE SW 16-23-11	220	1976
No. 2 Edwards "B" SEc SW SW 16-23-11	150	1945
Manhattan Oil Co. et al's No. 1 Bradfield, SEc NW 2-22-10	*	2312
Skelly Oil Co.'s No. 1 Todd, NEc SE 9-22-13	*	2325
Theat Oil Co.'s No. 4 Rockhill, NWc NE NW 31-24-11	*	2565
McGinnis et al's No. 1 Carrington, SEc NE NW 9-25-10	*	2240
Ballard et al's No. 1 Burk, NWc SW 8-26-11	*	2300
Sumner County—		
Roxana Pet. Co.'s No. 6 Churchill, NWc NE SW 25-31-2	750	1900
Cosdem e tal's No. 1 Riner, NWc 56-30-2	*	4162
Woodson County—		
Fields Cross e tal's No. 3 Stephenson, c SW NE 9-25-14	¶2	1452
Barber County—		
Rowland et al's No. 1 Pickens, NEc NW NE 27-30-14	*	....
Lyon County—		
Golden et al's No. 1 Lester, SEc NW 16-21-11	*	2544
Marion County—		
Lariaus & Robinson's No. 1 Warner, NEc NW 16-21-4	*	2468

Oklahoma

Company, Well and Location	Initial Production Bbls.	Depth
Carter County—		
Humble Oil & Ref. Co.'s No. 8 Jordan, NE SW SW 18-1-3 2590		2745
Coline Oil Co.'s No. 9 Perce, NE SW SE 7-2-2	13	2558
Creek County—		
Devonian Oil Co.'s No. 5 Miller, c SE NE 14-19-8	40	2901
C. G. Tibbens' No. 34 Unallotted, c S L N½ 30-15-9	550	3649
Selby Oil & Gas Co.'s No. 1 Fife, NEc 28-18-11 .....¶2¼		2300
Wallace et al's No. 1 Layton, c W L NE NE 3-17-11	*	2355
Garfield County—		
Sinclair Oil & Gas Co.'s No. 43 North Walker, SEc NE 13-22-4 .	270	3052
No. 67 North Walker, NWc SE NE 13-22-4	40	2517
No. 70 North Walker, c N L S½ N½ NE 13-22-4	320	3705
No. 32 F. M. Beleal NWc SE NE 24-22-4	10	1194
Grady County—		
Magnolia Pet. Co.'s No. 2 M. E. Deryden NWc SE 35-5-8	¶17	2375
M. Smith et al's No. 1 Bledsoe, NE SW SW 29-3-7	*	3540
Little Nick Oil Co.'s No. 1 Farwell, SW NW NW 24-5-8	*	....
Kay County—		
Harris & Hahn's No. 1 Hanzell, SWc 15-29-1	¶30	1647
Comar Oil Co.'s No. 4 "W" Buell, NW SW NE 21-29-1	870	3364
No. 11 "W" Buell, SE NW SE 21-29-1	950	3410
No. 13 "W" Duncan, NW SW SW 21-29-1	230	3400
No. 4 "W" Priboth NE SE NW 21-29-1 1100		3360
No. 12 "W" Priboth, SW NE NW 21-29-1	750	3417
Anderson et al's No. 2 Ferguson, NEc SW 31-27-2	¶4	610
Marland Oil Co. et al's No. 1-B Richmond, SEc NW 1-26-2	830	3603
No. 6 North, lease No. 1, NEc 12-26-2	650	3624
No. 9 North, SW NE NE 12-26-2	400	3663
No. 1 Walkingkey, c W L E½ SW SE 18-25-2	100	3928
Comar Oil Co.'s No. 3 Horne, NW NE NW 8-28-1	*	3762
Marland Oil Co.'s No. 6 Thomas, SE NW SW 15-25-2	*	4440
Muskogee County—		
Bell Oil & Gas Co.'s No. 7 Richards, NEc NW SE SE 8-16-15	10	1226
Inidan Capitol Oil Co.'s No. 1		

The Future of Oil ?



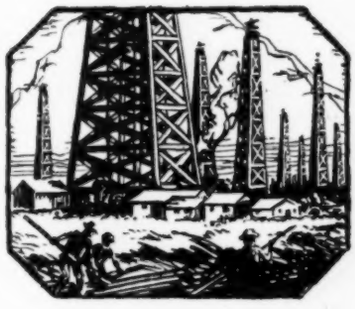
Good Steel Reduces Waste

The opportunity which is ahead of the Petroleum Industry is greater than ever before. As fuel for air-planes, ships, locomotives, automobiles and countless other devices, oil plays a very important part in the nation's industry.

Modern methods plus efficient equipment combined with co-operative effort on the part of producers makes this prosperous condition possible.

ASCO STEELS

are also doing their part in this great industry and the future holds more in store for those who use them than those that don't



"A Story of Steel and Oil" is a historical sketch of the petroleum industry. Write for your copy today.

ASCO STEEL

STANDS SUPREME

THE ANDREWS STEEL CO.

NEWPORT (ASCO) KENTUCKY

DISTRICT OFFICES:
502 Cosden Bldg., Tulsa, Okla.
61 Fremont St., San Francisco, Calif.
724 Kohler St., Los Angeles, Calif.

Say you saw it in The OIL WEEKLY

Company, Well and Location	Initial Production Bbls.	Depth
Washington, c N L SW NW 13-14-17	*	2418
H. H. Francis' No. 3 McIntosh, NEc SW 17-15-17	*	1415
Okfuskee County—		
Josey Oil Co.'s No. 11 McCoy, NE SW NW 33-12-11	400	3659
J. M. Kessel's No. 1 Scott, SWc 8-12-11	*	3604
J. J. Deaner et al's No. 1 Holmes SEc NE 15-11-11	*	3566
Okmulgee County—		
W. B. Pine's No. 2 Sells, NWc SW NW NW 10-15-14	15	1645
No. 5 Corbray, NWc SE NE NE 9-15-14	40	1626
R. C. Vincent's No. 2 Andreson, SW SE NE 3-15-14	30	1516
C. O. Buckles' No. 18 Jackson, SWc NW SW NW 5-11-12	5	2054
King & Jackson's No. 3 Beideman, c N L SE SW 11-13-12	20	1965
Lavery & Farrall's No. 1 Carter, NWc SE 10-15-14	*	2179
J. L. Selby's No. 4 Stevens, c N L NW SW 10-14-14	*	1928
Lambert Oil & Gas Co.'s No. 1 Jackson, SEc NE NW 24-16-14	*	2308
T. A. Johnson's No. 2 Marsey, NWc NE NE 16-15-12	*	2760
Acta Oil & Gas Co. et al's No. 1 Bradford, NWc SW SW SW 27-14-12	*	2779
J. A. Swindler & Sons, No. 1 Hechman, SEc SW SW 22-13-11	*	2623
Osage County—		
Phillips Pet. Co.'s No. 10, SE NW NE 12-27-5	100	3004
No. 5 NW SW NW 7-27-6	125	3017
Kewanee Oil & Gas Co.'s No. 3 NWc 34-27-6	1600	2938
Osage Gas Producers' No. 375, NEc SE SE NW 5-27-11	¶1½	1821
Peters Pet. Co.'s No. 1, NEc NW 26-25-9	5	2156
Superior Oil Corp.'s No. 1, SEc 16-23-12	¶2¼	1553
Okla. Natural Gas Co.'s No. 763, NWc SE NW 11-21-10	¶3	1585
Skelly Oil Co.'s No. 1, SWc NW SW 8-21-11	*	2163
Pawnee County—		
Magnolia Pet. Co.'s No. 3 Fugate, SWc NW SW 9-20-6	40	3065
Black et al's No. 2 Cotton, NEc SW NE 6-20-8	35	2553
Charles Burton et al's No. 5 Brown, SWc SE NW 25-20-7	*	2810
Magnolia Pet. Co.'s No. 1 Gilgert, NEc 30-23-3	*	4247
Seminole County—		
Mid-Continent Pet. Corp.'s No. 4 Rentie, NE SW SE 14-9-6	440	4297
Amerada Pet. Corp.'s No. 1 Killingsworth "B" SWc NE 23-9-6	215	4099
Carter Oil Co.'s No. 3 Killing, SE NE NW 23-9-6	1540	4054
I. T. I. O. Co.'s No. 1 Harjo, SEc 23-9-6	415	4050
Pure Oil Co.'s No. 7 Strothers, SWc 26-9-6	3400	4010
No. 8 Strothers, SW SE SW 26-9-6	3050	4060
11 Strothers, NWc SW 26-9-6	1460	4055
Carter Oil Co.'s No. 2 Lukes, SEc E H NE 27-9-6	485	4009
Gypsey Oil Co.'s No. 1 Butler, NWc NE NE 35-9-6	235	4061
Barnsdall Oil Corp.'s No. 1 Jones, NEc 34-9-6	5900	4092
Atlantic Oil Prod. Co.'s No. 1 Cudjo NW NE SW 35-9-6	1015	4137
Gypsy Oil Co.'s No. 2 Butler, SW NE NE 35-9-6	440	4065
Sinclair Oil Co.'s No. 5 Cudjo, NEc NW NW 35-9-6	3300	4058
T. B. Slick's No. 3 Franks, NW SW NE 35-9-6	908	4087
No. 5 Franks, NEc NW NE 35-9-6	620	4057
Amerada Pet. Corp.'s No. 2 Grayson, SWc SE SE 32-8-8	*	4920
Magnolia Pet. Co.'s No. 1 McNea, SEc SW 28-8-6	*	
Barnsdall Oil Corp.'s No. 3-a Carter SW SE NW 24-9-6	*	368
Stephens County—		
Davis Malernee's No. 2 Burke, NW NE NE 34-1-8	¶5	1460
Carter Oil Co.'s No. 9 Garvin-Sims, NE SE NW 2-2-5	40	1501
Steve Linson's No. 4 Brown, NEc SW SE 23-1-9	*	2185
E. C. Elzie's No. 1 Mc Partridge, NW SE SE 24-1-9	*	70
Harry Hanbury's No. 1-a Gilworth, c S L SW NW 2-2-8	*	1715
Texas County—		
Wilcox O & G Co.'s No. 1 Hovey, SEc 21-4-14	¶6	2720
M. M. Valeriue O. & G. Co.'s No. 1 Hovey, SEc 3-5-12	*	4002
Wagoner County—		
Mitchell Oil Co.'s No. 3 Prince NEc SW SW SE 35-17-16	¶5	1406
West's No. 6 Wilson, SWc SE 24-17-15	*	1033
Tulsa County—		
W. E. Holmes' No. 1 Rigg s, NEc SW 26-19-10	*	2715
Mayes County—		
J. C. Fore et al's No. 1 Longerier, NEc SE 20-20-20	*	2036
Garvin County—		
The Texas Co.'s No. 3 Derdeyn, SE NE SE 17-1-3	*	2028

California

PENNSYLVANIA

Company, Well and Location	Initial Production Bbls.	Depth
Huntington Townsite—		
Kohlbush & Johnson's Huntington 1	600	4365
Prudential Oil Corp.'s well	1000	4382
Standard Oil Co.'s Pacific Electric 1	2297	4300
H. L. Whitson's No. 1	200	4327
Baldwin Hills-Inglewood—		
Standard Oil Co.'s Baldwin-Cienega 14, wo	30	2195
Baldwin-Cienega 25, wo,	80	2098
Montebello—		
McGinley Oil Co.'s No. 5	10	3426
Ventura Avenue—		
General Pet. Corp.'s Barnard 1A	300	6200
Honolulu Cons. Co.'s No. 29	170	3135
No. 88	144	2963
Kern Front—		
General Pet. Corp.'s No. 22	80	2059
Julian Pet. Corp.'s Higgins	*	510

Eastern States

Company, Well and Location	Initial Production Bbls.	Depth
Bradford Field—		
South Penn Oil Co.'s Bingham 553 tract 87	5	
Bingham 151 tract 36	4	
Bingham 150 tract 77	3	
Bingham 150 tract 79	3	
Bingham 533 tract 87	3	
Bingham 439 tract 99	3	
Bingham 390 tract 1	2	
Bingham 154 tract 36	3	
Fee 1	7	
Fee tract 35	2	
Fee 2	3	
Jones 219	2	
Jones 220	3	
Whipple 129	2	
Whipple 130	3	
Weston & Hallock 99	3	
Forest Petroleum Corp.'s Forest No. 1, tract 1B14	3	
Forest No. 1 tract 1A18	3	
Forest No. 1 tract 1E3	3	
Rutherford 1	2	
Rutherford 2	2	
Hazelwood Oil Co.'s 27 tract 128	2	
Bingham 129	3	
Benson & Benson's Benson 3	7	
Associated Producers Co.'s Bingham 568 tract 371	8	
Tibbetts & Murphy's Hostetter 6	4	
McDowell & Andrus's Bingham 296 tract 107	4	
Bingham 296 tract 108	4	
R. S. Pringle's Bingham 464 tract 20	4	
T. H. Kennedy's Chamberlain 1	4	
E. D. Kepper Oil Co.'s Kepper 1	12	
A. R. Stambaugh & Co.'s Rasey 1	8	
T. J. Thompson Jr.'s Borden 1	3	
Piper & Lloyd's Ekas 23	2	
Ekas 24	2	
M. Hungiville's Hungiville 28	4	
E. Daly's Burns 9	5	
Jane Zane Estate's Quintuple 3	3	
Butler County—		
Southern Oil Co.'s Grimmer Bros. 4	15	
Bear Creek Oil Co.'s Donnelly 1	12	
Troutman & Perrin's Griffin 1	10	
Caring, Leighter & Co.'s McGuire 1	¶1	
Burns & Sherwin's Jack 1	¶1¼	
Venango County—		
United Natural Gas Co.'s Blauser 3764	¶1	
G. H. Torrey's Cox 6	4	
M. T. Bowers' McClintock 18	2	
Midland Oil Corp.'s McNellie 26	3	
McNellie 27	3	
Bankson Bros.' Tarr 20	3	
J. H. Weaver's Criswell 3	*	
Mercer County—		
Zook & Sloan's Lot 420 tract 48	2	
F. H. Taxis's Rogers 1	2	
Clarion County—		
Connor & Co.'s Schiebell 1	¶1½	
Lance, Knight & Co.'s Heeter 1	*	
W. H. Houpt's Brown 2	¶12	
Greene County—		
Burns & Co.'s Robert L. Grimm 1	*	
Independent Oil & Gas Co.'s C. F. Mosier 1	¶1	
Carnegie Natural Gas Co.'s Alice C. Henderson 1	¶2	
C. J. Morris 2	¶3	

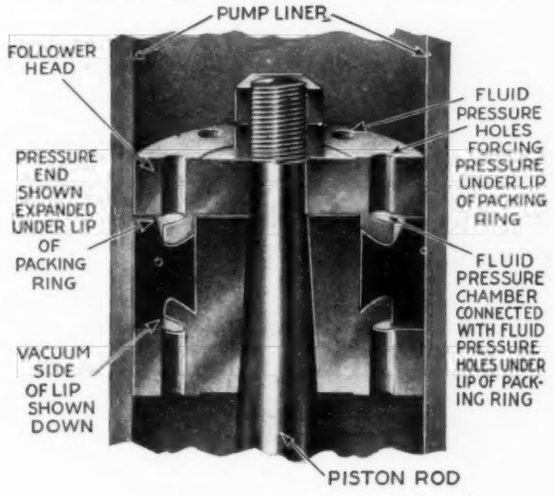
NEW YORK

Company, Well and Location	Initial Production Bbls.	Depth
Alleganey County—		
N. V. V. Frachot, Trustee, Fries 3	7	
Brandel Heirs 2	3	
Herrick & Stambaugh, Stambaugh & Co. 2	7	
Empire Gas & Fuel Co.'s Empire 4	5	
Empire 5	4	
Lippert & Co.'s Lippert 2	4	
McKean Natural Gas Co.'s Lamphere 2	¶½	
A. C. A. Oil Corp.'s Fee 1	3	
Whitford & Co.'s Whitford 1	4	

WEST VIRGINIA

Company, Well and Location	Initial Production Bbls.	Depth
Marshall County—		
Carnegie Natural Gas Co.'s S. N. Cope 1	10	
Waynesburg Gas Co.'s McCuskey Heirs 2	*	
Guy Peterson's Alfred Howard Heirs 4	¶2	
Manufacturers Light & Heat Co.'s D. A. Williams & Co. 2	¶2	
Hope Construction & Refg. Co.'s William Geho 1	*	
Lincoln County—		
United Fuel Gas Co.'s Horse Creek Land & Mining 7	¶1	
Cambidge Gas Co.'s E. J. Adkins 1	¶1	
Ray & Osborne's J. L. King 3	¶1	
Wysong, Jones & Co.'s C. McDonald 1	¶1	
Ritchie County—		
Carnegie Natural Gas Co.'s L. F. Cox 2	¶¾	
A. R. Brake 1	¶1¾	
Newton Cox 1	*	
Clifton Louden & Co.'s J. H. Dallop 1	¶½	
Wetzel County—		
Silver Hill Oil Co.'s L. M. Burley & Co. 1	*	
Pittsburgh & W. Va. Gas Co.'s J. J. Ferrell 1	15	
Manufacturers Light & Heat Co.'s William Renner 4	¶2	
Monongalia County—		
Pittsburgh & W. Va. Gas Co.'s E. B. Watson 1	¶¼	
Carnegie Natural Gas Co.'s Josephus Wilson 3	¶1½	
Maxon Oil Co.'s A. Whistler 3	¶1½	
Clay County—		
South Penn Oil Co.'s O. D. Stockley 47	30	
O. D. Stockley 50	40	
Roane County—		
Heck Oil Co.'s J. W. Conley 7	5	
United States Gas Co.'s Asbury Lewis 1	¶¼	
Calhoun County—		
Hope Construction & Refg. Co.'s Robert Law	4	

THE KIBELE PATENTED PRESSURE SELF EXPANDING FRICTIONLESS AND NON-SLIPAGE PISTON


PUMP LINER
FOLLOWER HEAD
PRESSURE END SHOWN EXPANDED UNDER LIP OF PACKING RING
VACUUM SIDE OF LIP SHOWN DOWN
FLUID PRESSURE HOLES FORCING PRESSURE UNDER LIP OF PACKING RING
FLUID PRESSURE CHAMBER CONNECTED WITH FLUID PRESSURE HOLES UNDER LIP OF PACKING RING
PISTON ROD

Will Out-wear Any Other Piston Manufactured

Proven by some of the largest users of pump equipment in the oil fields

(names furnished on request)

Will fit any make of pump, and will pump any and all kinds of fluid.

Sold by Supply Stores

Write for literature

Mission Sales Company

First National Bank Bldg.

Houston, Texas

Company, Well and Location	Initial Production Bbls.	Depth
Hope Natural Gas Co.'s S. E. Sickle 1	¶2	....
Doddridge County—		
Zinn & Co.'s M. J. Hudkins 1	¶1	....
J. E. Trainer's M. O. Palan 1	*	....
Harrison County—		
Hope Construction & Refg. Co.'s T. Payne 1	3	....
Cabell County—		
Harshbarger Oil & Gas Co.'s C. S. Morris 1	*	3304

KENTUCKY

McCreary County—		
Ashe, Sampson & Co.'s Unknown 1	*	....
Cumberland-Monroe Counties—		
Baird & Hickman's Fulton Grider 4	300	300
J. H. Morgan 5	300	298
Wood, Haislet & Co.'s G. W. Brockman 8	240	293
Wilcox Bros.' Davidson 1	5	390
Ohio County—		
Creek Drilling Co.'s Ambrose Heirs 1	75	696
Clinton County—		
McClintock, Reed & Co.'s Pierce Bros. 5	6	825
Barren County—		
Esslinger, Scott & Hice's Bradford 7	8	....
Bradford 8	7	....
Kentucky Petroleum Syndicate & Co. Boles 2	3	....
Merrifield & Hedges' Dean 6	7	....
Sanson & Norris Bros.' Berry 12	4	....
Hunt, Mitchell & Leech's Taylor 2	*	....
Warren County—		
Gust New's Joe Lightfoot 1	¶½	450
S. H. Russell & Co.'s J. T. Scott 12	5	1080
R. B. Walker's Robert Walthall 3	2	....
D. C. Wheeler 5	3	....
Hogan & Co.'s Hundley-Walters 2	3	....
J. J. Fort's Nick White 1	2	....
Onsel-Hanrahan Oil Co.'s C. G. Davenport 3	4	1080
Allen County—		
Bagley & Kamminski's Smith Cooksey 14	*	....
Moorman & Andrus' Pinley Stamps 18	2	....
Harley & Coatsworth's Lon Oliver 4	5	....
Elliott County—		
Edra Lee Oil & Gas Co.'s J. Dials 5	15	....
Johnson-Magoffin Counties—		
Hupp, Duff & Co.'s B. F. Whitt 2 farm 6	10	....
Oliver Jenkins' B. F. Whitt 3	10	....
W. P. Carpenter's J. M. Frazier 4	5	....
Wayne Counties—		
W. O. Souther's Jones Heirs 4	*	....
J. E. Marsh's J. E. Marsh 1	*	....
Pigeon Rock Oil Co.'s Stearns Lumber & Coal 10	10	....
Estill County—		
Wood Oil Co.'s Huston Tipton 16	*	....

SOUTHEASTERN OHIO

Washington County—		
William Huntsman & Co.'s Henry Slobaker 1	25	....
Palmer & Co.'s M. E. Coffman 5	6	....
Kiggens & Co.'s Hiram Tresh 5	¶1	....
Hune, Starr & Co.'s Daniel Thomas 1	*	....
Morgan County—		
Ohio Fuel Supply Co.'s G. F. Kennard 4	¶2	....
C. F. Sperry & Co.'s Oliver M. Lovell 4	¶¼	....

CENTRAL OHIO

Guernsey County—		
McKay, Smith & Co.'s Andrew Slabis 1	160	....
Miller-Moore Oil & Gas Co.'s M. & M. Dedrick 2	75	....
Ohio Fuel Supply Co.'s R. P. Lansing 1	15	....
Ohio Fuel Gas Co.'s Mary Pazzo 1	6½	....
Kemrow Producing Co.'s Amos Mc Elois 1	¶5	....
Athens County—		
Richland Oil & Gas Co.'s E. R. Lash 3	4	....
Ronshausen & Co.'s J. M. Wood 9	3	....
Hope Oil Co.'s Childrens Home tract 3	3	....
Kempf & Co.'s John Rowland 1	*	....
Licking County—		
Frampton Oil Co.'s Jay Frampton 1	75	....
Leonard Oil & Gas Co.'s Meyers Heirs 10	20	....
Edward H. Everette Co.'s J. C. Millard 1	4	....
Holmes County—		
East Ohio Gas Co.'s John F. Roby 1	¶1½	....
Kemrow Producing Co.'s V. Tidball 1	50	....
Loyd Sandles 1	¶4½	....
Hocking County—		
Ohio Fuel Supply Co.'s Edward Hass 1	40	....
Snider Oil Co.'s John Bickel 1	3	....
Cowen & Co.'s J. M. Balby 1	*	....
Coshocton County—		
East Ohio Gas Co.'s M. J. Michaels 1	¶5	....
Meigs County—		
The Pure Oil Co.'s John Deer 1	¶¼	....
Muskingum County—		
Swingle Oil & Gas Co.'s Adam Fisher 1	¶¼	....

NORTHWESTERN OHIO

Ottawa County—		
The Ohio Oil Co.'s J. H. Myers 12	12	1367
Onsel Bros. & Co.'s F. H. Dischinger 7	11	1330
Haubert & Hummell's G. Manahan 4	3	1375
Lucas County—		
The Ohio Oil Co.'s G. J. Niles 47	22	1420
Seneca County—		
Onsel Bros. & Co.'s M. E. Steinbrook 6	10	1296
Mercer County—		
T. G. Ayers' A Rockwood 2	10	1147
Darke County—		
Hance & Hoffman's G. L. Toman 4	7	....
Shelby County—		
The Ohio Oil Co.'s T. Goffena 5	*	....

MICHIGAN

Saginaw County—		
Wayco Producing Co.'s Hanson 1	15	1877
Superior Oil Co.'s Hermansau & Weiss Streets 1	15	1829
Saginaw Prospecting Co.'s F. Reamer 2	15	1846
The Sun Co.'s Shaplank 1	*	1998
Saginaw Interests' Householder 1	*	....

Activity In Colorado Shale Fields

Denver, Colo.—Activity in the shale fields near De Beque indicates that shale operators are determined to make a bid for commercial production during the present year. One operator has completed a small run from an improved retort and the results were especially gratifying, officials of the company said. The oil scaled 34 gravity and was very rich in gasoline, according to the operators of the retort. The oil should yield more than 50 per cent gasoline, according to conservative estimates. Although little attention has been paid to shale operations in the State, many of the larger operating companies are quietly acquiring large blocks of land. It is generally admitted, however, that profitable shale production from the present retorts is not probable.

He Helped to Drill the First Oil Well

(Continued from page 86)

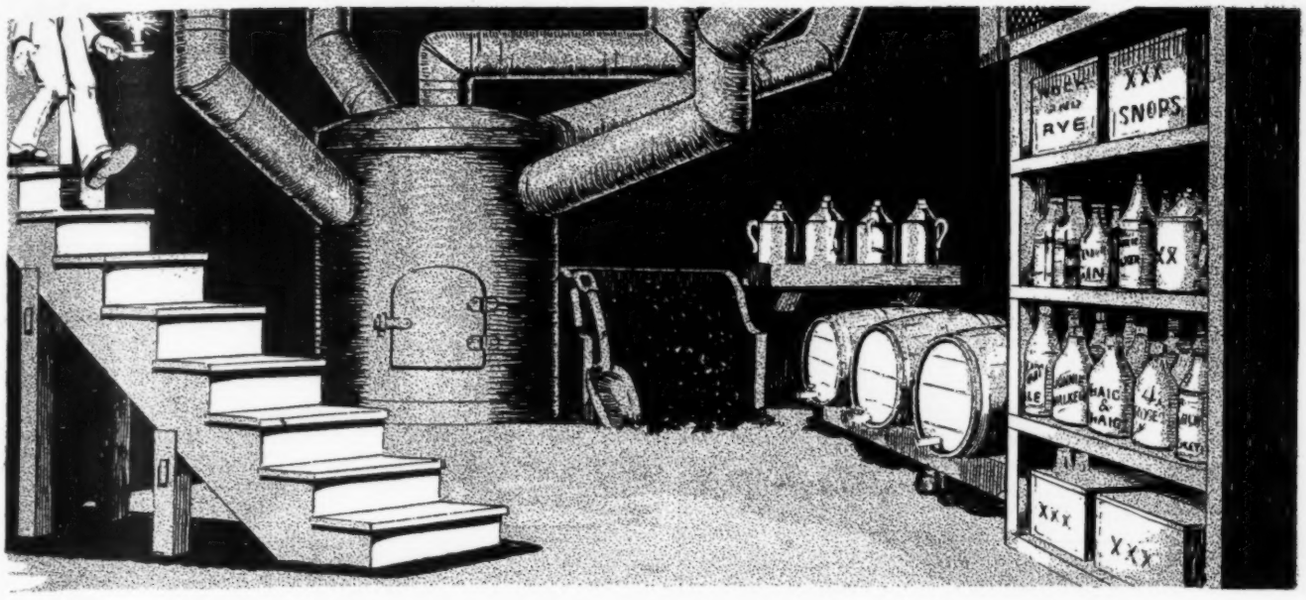
He is the only living member of that valiant group who were engaged in the business of drilling the first oil well. Drake died a ward of the state, a saddened, bitter, morose man. Bissell and Eveleth have passed on these many years. Doctor Brewer, Watson—all are gone. R. D. Fletcher, genial and generous merchant; Peter Wilson, another merchant—both of whom loaned Drake the money that made the completion of the well possible, have gone to their reward. Samuel Smith is the last living member of that little band of industrial pioneers.

Life has been kind to him—and he has been kind to life. He has witnessed much: three wars, in one of which he served. He has witnessed the oil industry grow almost beyond the bounds of reason. When he pumped the Drake well oil sold for $1.00 a gallon—and he has watched the price fluctuate hither and yon. He has watched refining methods change into ordered perfection; he has watched the invention and the development of the internal combustion engine that has made the oil industry grow by leaps and bounds. He has witnessed the steady change in drilling methods from the crude apparatus used in 1859. He has seen presidents come and go; in his time woman suffrage has come into being; bobbed hair, short skirts—what hasn't the man seen?

Much of it, one suspects, Samuel Smith has noted with a quiet little twinkle in his wise old blue eyes; some of ths hectic advancement in living has probably caused him to chuckle a bit in a kindly fashion. Somehow one can't imagine him being caustic or cruel—for, in spite of his virile strength and nervous energy, there is about him an air of gentle tolerance and kindly good humor.

As this is written Samuel Smith is working in a warm and sunny corner of his shop, bending over boxes of black, pulverized earth. He is planting the seeds for his early tomato plants and, because he knows and loves plants, those seeds will sprout and grow up into hearty, strong plants. Useful work! Take it away from Samuel Smith and one would commit a crime of unusual magnitude. He loves hard work! And looking at his bright eyes, his youthful smoothness of face, his thick white hair, his agile step, his ever enlivened interest and his wholesome philosophy of life, one concludes that hard work loves Samuel Smith.

When the last chapter in the history of oildom is written perhaps the first chapter will be completed in truthful detail. And in both chapters the name of Samuel Smith of Titusville, Pennsylvania will figure. Perhaps his name will not lead all the rest; but it will be there nevertheless and the record will certify as to all I have so poorly written—and more.



ANOTHER REASON FOR VISITING THE CELLAR IS DONE AWAY WITH

When underreaming, the BOVAIRD Grip CASING SPIDER can be operated from the derrick floor with a rope or wire attached to the handle

BOVAIRD

FOR SALE BY ALL LEADING SUPPLY HOUSES

Say you saw it in The OIL WEEKLY

WILDCATS FROM ALL SECTIONS

Kansas Wildcats

BARBER COUNTY—Vickers Pet. Co. et al's Ott 1, SWc 30-32-14, sd 4506 ft. Shaffer O. & G. Co.'s Alexander 1, C SE 13-33-13, ts 4440-47 ft, 5 mil gas shut in.

BARTON COUNTY—Huffin et al's Smith 1, NE SE NE 17-19-11, fsh 5090 ft.

LYON COUNTY—Culp et al's No. 1, SWc SE 26-19-10, sd 960 ft. Gashe & Balliere's Stratton 1, SEc NW 32-20-13, sd 750 ft.

RENO COUNTY—Sheldon et al's Hoanfison 1, SEc NW 10-23-4, dr 3745ft.

SEWARD COUNTY—Wilson et al's Son 1, C NE NE NE 14-33-33, sd 400 ft.

Oklahoma Wildcats

COMPLETIONS

Okfuskee County—

J. M. Kessle's Scott 1, SW 8-12-11.. * 3604

Texas County—

Valerius O. & G. Co.'s No. 2, SEc SE 35-5-12 . ..... * 4002

H. F. Wilcox's Hovey 1, SE C SE 21-4-12 . ..... * 2720

DRILLING REPORT

BECKHAM COUNTY—Magnolia Pet. Co.'s No. 1, NEc 21-9-23, bldg rig.

CADDO COUNTY—W. J. Hartley's Calbreath 1, SEc NE SE 28-5-12, dr 3394 ft. J. A. Abernathy's No. 1, C SW NE 23-5-12, sd for 6⅝-inch 2045 ft.

CANADIAN COUNTY—Hannum, Frank & Slick's Pazoureck 1, SW NE 29-13-5, dr 4305 ft.

CIMMARRON COUNTY — Ramsey Bros.' No. 1, C NWN E 27-5-5, show oil 4195 ft. Fenton, Brokine et al's Smaltz 1, SEc NE NE 2-2-0, spd and sd.

COMANCHE COUNTY—Mid-Kansas O. & G. Co.'s Cox 1, NEc SE NE 30-1-13, td 1920 ft, sd.

GARFIELD COUNTY— Sinclair's Fee 1, SWc SW NE 2-20-5, fsh tools 5002 ft.

GRANT COUNTY—Ostot Dev. Co.'s Snyder 1, NEc 6-28-4, td 4546 ft, sd with some of 5-inch still in hole. Brazell & Moses' Royce 1, SWc NW 34-28-4, sd 550 ft. Dedman, Flenngan & Hennage's Sherran 1, NEc SW 16-26-3, sd 1910 ft.

HUGHES COUNTY—Snowden & McSweeney's Stewart 1, NWc SE 11-5-8, proposed lcn.

KIOWA COUNTY—A. C. Varner's Boham 1, SEc S WNW NW 5-6-10, sd 1127 ft, litigation.

KINGFISHER COUNTY—Pet. End Core Drilling Co.'s Canfield 1, C NW SE 6-16-7, rig. McKenna & Crawford's Sturgeon 1, NWc SW 27-16-6, sd 2115 ft. Reiter & Foster's Davison 1, SWc 23-15-5, rig, T. B. Slick may take over.

KAY COUNTY—Ponca Lee Oil Co.'s McNeal 1, NE 32-26-2, td 2795 ft, sd. Tonkawa Dev. Co.'s McDaniels 1, C SE SE SE 15-25-1, hfw 2450-75 ft, sd 2535 ft, td.

LINCOLN COUNTY— Wentz Oil Corp.'s Lukenbeal 1, SWc SE 34-17-2, dr 4430 ft. Mid-Kansas Oil & Gas Co.'s Griswold 1, NEc NW 33-17-4, sand 4385-4424 ft, est 4 mil ft gas, water 4423-24 ft, set 5-inch 4441 ft, td 4534 ft, water sd.

LOGAN COUNTY—Byram & Emery's Scott 1, NWc SE 33-19-4, dr 3750 ft. Carter Oil Co.'s Rogers 1, SWc NW 32-19-3, dr 4756 ft. Franklin Oil & Gas Assn.'s Moore 1, SWc SE 28-18-4, sand 4059-65 ft, swabbed 32 barrels in 18 hours, sand 4086-90 ft, flowed 40 barrels oil and some water per day, pump 75 barrels per day. Haley & Pioneer's Quair 1, SWc SE 11-18-3, td 1900 ft, rig burned down, will rebuild. Zingery et al's Baker 1, NWc NE NE 5-17-1, sd 4517 ft. T. B. Slick's Berry 1, SWc SE 28-17-1, dr 3878 ft. Blackford O. & G. Co.'s Lier 1, C S L N½ SE 28-16-1, sd 1675 ft, litigation.

PAYNE COUNTY—Twin State Oil Co.'s Tibler 1, NEc NW NE 23-18-1, dr 2580 ft.

NOBLE COUNTY—Geo. Miller's 101 Ranch 1, NEc 1-24-1, by tools running 5-inch at 4314 ft, td.

OKFUSKEE COUNTY — T. A. Johnson's Leady 1, NEc SE SE 25-12-9, Wilcox 3304-3318 ft, hfw sd.

POTAWATOMIE COUNTY — Shaffer et al's Ives 1, NWc SE SE 12-10-3, sd 3620 ft. McCullough's Madgett 1, NWc 25-10-4, ts Wilcox 4982 ft, td 4985 ft, 300 ft water, co. Tidal Osage Oil Co.'s Kenyon 1, SWc SE SE 3-8-4, top Wilcox 4422 ft, hfw, dr 4707 ft. Davis Detrick's McGarthy 1, SEc NW 10-6-3, dr 4802 ft. I. T. I. O. Co.'s School Land 1, SEc SW 16-8-5, cmt 8-inch cas 3573 ft.

SEMINOLE COUNTY — Carter Oil Co.'s Harjocke 1, NEc NW NW 26-10-6, sand 3463-85 ft, oih, td 3578 ft, co. Superior Oil Co.'s Noble 1, SEc SW SE 10-9-6, 4105-4145 ft hfw, dr 4223 ft. Pure Oil Co.'s Joah 1, C E L NW NE 15-9-7, ts 3494 ft, td 3512, 10 barrels oil, 30 barrels water, trying to shut off water. Magnolia Pet. Co.'s Strothers 1, SEc NW 17-8-6, td 2270-14 ft bwsd for 8-inch cas. I. T. I. O. Co.'s House 1, NW NW NW 1-7-6, sand 3101-3126 ft, 10 mil ft gas, to run 8-inch cas, spray water; Sarah Wiseman 1, NW NW 32-7-7, setting 8-inch cas 2505 ft; Payne 1, NW NE 2-8-6, cmt 8-inch cas. Kennedy & Riverside Oil Co.'s Netley 1, C S½ NE SE 24-5-5, dr 2725 ft. Atkinson & Carter's Street 1, SEc NE NW 30-7-8, tvl 4303, dr 4305 ft. Simmons & Bean's Lammeter 1, NWc NE NE 7-7-6, rog, first report.

TILLMAN COUNTY—Ossie Drilling Co.'s Snelling 1, SEc SE SE 13-1-18, sd 1525 ft.

TEXAS COUNTY—H. F. Wilcox's Zea 1, SWcSE 29-3-12, ur 6-inch 3620 ft. Haley, Garber & Pulse's Ellison 1, NWc SE SE 4-1-12, sd 3505 ft will deepen. Connell et al's Tensey 1, SEc NW 5-1-19, spudded and sd.

Arkansas Wildcats

COMPLETIONS

Ouachita County—

Brown & Shepherd's Manolith 1, 2-13-18 . ..... * 2194

DRILLING REPORT

BRADLEY COUNTY — Arkansas Fuel Oil Co.'s Arkansas Lumber Co. 1, 25-16-12, sd 3144 ft. Johnston & Adams' Southern Lumber Co. 1, 12-12-12, set 10-inch cas 298 ft. Magnolia Pet. Co.'s Arkansas Timber Co. 1, 35-15-11, dr 4005 ft.

COLUMBIA COUNTY—Arkansas Fuel Oil Co.'s Barge 1, 14-18-22, rig. Columbia Oil Synd.'s Whitehead 1, 14-19-23, sd 500 ft. Haynes et al's Runyon 1, 3-16-21, set 12½-inch cas 150 ft. Ky-Ark Pet. Co.'s Doss 1, 29-19-20, sd 3018 ft. Scott Phillips' Davis 1, 6-18-20, set 8¼-inch cas 2115 ft.

LA FAYETTE COUNTY — Ken-Saw Pet. Co.'s Red River 2, 5-20-24, sw 2840 ft.

LINCOLN COUNTY—Pine Prairie Oil Co.'s Carter 1, 33-10-6, sd 30 ft.

MILLER COUNTY—Lenze et al's Dale 2, 28-15-26, dr 2745 ft. W. D. Nash's Priest 1, 26-14-26, sd 3550 ft.

NEVADA COUNTY — Advance Oil Co.'s Whitehead 1, 14-19-23, lcn. Furn et al's Cross 1, 12-13-22, set 10-inch cas 78 ft; Rhodes 1, 22-12-21, dr 1000 ft. Humble Oil & Ref. Co.'s Bodcau 4, 9-15-22, fsh 3595 ft. Prescott Oil Corp.'s Adams 1, 11-12-20, sd 1900 ft.

OUACHITA COUNTY — A. T. Grayson's Reynolds 1, 21-14-17, fsh 1740 ft. Harrell et al's Ponder 1, 9-12-17, sd 1680 ft. J. D. Reynolds' Chandler 1, 3-14-18, rig. Sunny Jim Oil Co.'s Berry 12, 33-15-15, sw, very little gas, 3927 ft. A. M. Sutton's Schoolhouse 2, 28-15-16, coring 2870 ft.

UNION COUNTY—Bondurant et al's Garner 1, 8-18-12, r 2635 ft. Calgo Oil Co.'s Primm 1, 9-18-17, dr 3105 ft. Grimes & Jones' 1, 8-18-14, dr 840 ft. Imperial Oil & Gas Co.'s Goodwin 1, 26-17-16, pulled 4½-inch cas 3118 ft. Marine Oil Co.'s Winn 1, 11-18-13, dr 2315 ft; Thompson 1, 10-18-13, set 4½-inch cas 2645 ft. Ohio Oil Co.'s Crain 1, 1-17-14, dr 1660 ft. Phillips Pet. Co.'s Dennis 1, 6-18-13, sd 3040 ft. Simms Oil Co.'s Ballard 1, 9-18-13, showing oil and sw 2556 ft. Superior Oil Co.'s Cordell 1, 5-18-13, flowing 3000 bbls sw and 25 bbls oil, 2984 ft. Thorpe et al's Peck 1, 22-18-13, sd 2701 ft. Wingfield et al Green 1, 15-19-13, dk; Morrison 1, 5-19-13, washing 2664 ft.

Louisiana Wildcats

COMPLETIONS

De Soto Parish—

Clark & Melat's Billingsley 1, 12-11-16 . .....¶1-5 2787

East Carroll Parish—

T. A. Snell's Henderson 1, 53-18-13 * 1863

Grant Parish—

Gulf Ref. Co.'s Swope A-1, 8-9-1e.. * 2213

Jackson Parish—

El Dorado Chief Oil Co.'s Jones 1, 3-14-4w . ..... * 3356

Richland Parish—

Gulf Ref. Co.'s Weyman 3, 2-17-8e.. * 1830

DRILLING REPORT

BOSSIER PARISH—Anderson et al's Bulkley 1, 9-20-13, sd 2040 ft. Bahan et al's (Amerada) Gray 1, 27-23-12, set 8¼-inch cas 1200 ft. Bloomquist et al's Jones 2, 23-18-11, dr 500 ft. Clark & Norton's Ford 1, 32-23-13, rig. Doern et al's Thomas 1, 9-22-11, dr 1760 ft. Magnolia Pet. Co.'s Dodson 1, 15-23-12, lcn. Palmer Corp.'s Bossier 1, 9-16-11, dr 3370 ft. Sligo Synd.'s Webb 1, 24-17-12, sd 2380 ft. Southwestern Gas & Electric Co.'s Dodson 1, 16-23-12, dk. Tubbs et al's Jacobs 1, 26-20-13, r 1170 ft. Woodley & Collins' L. & A. 2, 14-23-12, dr 2600 ft.

CADDO PARISH—Ackerman et al's Payne 1, 35-23-16, rig. Big Lake Oil Co.'s Rhodessa 1, 23-23-16, r 1507 ft. Dixie Oil Co.'s Robertshaw 81, 13-21-15, 20 million cubic ft gas 3635 ft; Slattery 10, 27-21-15, coring 3669 ft. Gilliam Synd.'s Sellington 1, 27-21-14, coring 2375 ft. Magnolia Pet. Co.'s Dillion 16, 24-21-15, to deepen, 3765 ft. The Texas Co.'s Glassell 2, 14-20-15, dr 2750 ft.

CATAHOULA PARISH — S. D. Hunter's Tensas Delta 2, 21-9n-7e, rig. Lochnager O. & G. Co.'s Beazley 1, 26-9n-6e, dr 2765 ft.

CLAIBORNE PARISH — Magnolia Pet. Co.'s Lee 1, 16-22-8, dr 1340 ft. Mitchell et al's Wilburn 1, 23-19-7, dr 1255 ft. Root Ref. Co.'s Cheatham 1, 19-22-6, fsh 2420 ft.

DE SOTO PARISH—Alden Oil Co.'s Powell 1, 13-11-10, sd 2210 ft. Craige et al's Riggs 1, 27-15-13, sd 1380 ft. Dixie Oil Co.'s Jenkins 1, 9-12-11, dr 4980 ft. Helm & Jarmon's Joyner 1, 28-12-11, show of oil, 2952 ft. Magnolia Pet. Co.'s Mason 1, 28-12-11, set 8¼inch 2589 ft. Snapp et al's Lanier 1, 7-11-11, 1 million cubic feet gas and 15 barrels sw 2762 ft. A. H. Tarver's Mathews B-2, 32-12-11, set 6-inch 2535 ft.

FRANKLIN PARISH — Araknsas Fuel Oil Co.'s Ship 1, 22-11-7e, lcn. Exploration Co.'s Moore 1, 12-11-6e, sd 2110 ft. Harrel & Hall's Duncan 1, 20-13-7e, sd 2057 ft. Robinson & Long's Baker 1, 3-15-7e, sd 1443 ft.

GRANT PARISH—Billeaud et al's Ball 1, 19-7-1e, sd 2400 ft. Gulf Ref. Co.'s Swope A-2, 17-9-1e, set 10-inch 158 ft. Humble O. & R. Co.'s L. & A. Oil Co. 11, 20-9n-2w, dk.

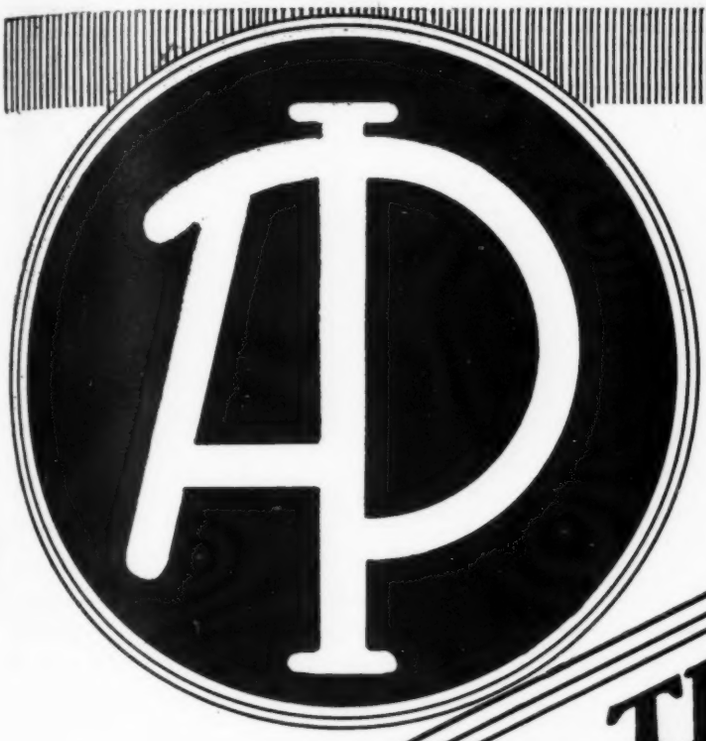
JACKSON PARISH—Ferguson Trust's Martin 1, 3-15-1e, sd 3254 ft. Houseman et al's Norton 1, 34-15-34, sd 400 ft. Louisiana Pet. Co.'s Davis 3, 22-16-4w, dr 1070 ft.

MOREHOUSE PARISH—Standard Oil Co.'s Interstate Cooperage 3, 9-19-8e, set 8-inch 1230 ft.

NATCHITOCHES PARISH—Humble O. & R. Co.'s Louisiana Long Leaf Lumber Co. A-2, 26-6-8w, dr 180 ft. Lawson et al's Clark-Morse 1, 23-5-6w, dr 2000 ft. Ohio Oil Co.'s L. & A. 1, 23-13-6w, dr 2230 ft. Three League Oil Co.'s Long 1, 34-10-8w, rig. Weaver Bros.' Frost 1, 25-7-7w, dr 600 ft. Wenzel et al's Brown 1, 35-11-7, dk.

RAPIDES PARISH — Minnesota Oil Co.'s Wattermark 1, 7-5-3w, sd 1716 ft.

RED RIVER PARISH—S. M. Cagle's Posey 1, 23-13-10, rig. Phillips Pet. Co.'s Long Bell



For the executive who is interested in operating the Oil Lease with the least waste, the following Bulletins, had for the asking, will prove beneficial.

No. 198—Marion Steel Bull Wheels.
No. 200—Irish Pulling Machine.
No. 202—Marion Peerless Reversible Clutch.
No. 203—Marion Gas Engines.
No. 205—Marion Band Wheel Powers.
No. 214—Marion Hi-Test Sucker Rods.
No. 217—Marionhill Pitmans.
No. 219—Marion Standard Rig Irons.
No. 228—Marion Metal Buildings.
No. 231—Marion Steel Derricks.
No. 232—Marion Miscellaneous Oil Well Equipment.
No. 234—Marion No. 80 "Little Giant" Power.

STANDARDIZED

Just what do we mean by standardized? In the early days of manufacturing, transportation and trading, individualism was the rule; it was picturesque but it was also wasteful and expensive; the lack of uniform methods of manufacturing and equable raw material made it difficult if not impossible to produce anything economically; in the struggle to capture the various markets, there was produced innumerable contrivances, all intended to perform the identical service; the useless competition which arose from each concern endeavoring to have his particular equipment specified was expensive and as the economic law always dictates—the purchaser had to pay the cost.

Railway, telephone, telegraph systems, merchandising and manufacturing concerns, banking, educational and practically everything that is successful is now conducted on the idea of standardization.

Consequently we all enjoy comforts and a high standard of living that only a few enjoyed a generation or two ago.

In the manufacturing of The Marion Line of Oil Drilling and Pumping Equipment we follow the recommendations of the American Petroleum Institute, as it means Standardized Equipment and better service at minimum cost to the Oil Producer.

Standardize, Metalize and Economize with the Marion Line of Oil Well Equipment

Write for Bulletin No. 219
Standardized Rig Irons

Marion Machine, Foundry & Supply Co.

Marion, Indiana

Say you saw it in The OIL WEEKLY

1, 16-12-8, lcn. The Texas Co.'s Marsten 1, 16-14-11, sd 2621 ft.

RICHLAND PARISH—Aarnes et al's Hawley 1, 3-18-9e, sd 2587 ft. Gulf Ref. Co.'s Marshfield 1, 30-17-6e, set 10-inch 948 ft; Wayne 1, 36-17-5e, set 10-inch 902 ft. S. D. Hunter's McCoy 1, 29-16-5e, set 12½-inch 211 ft; Seibert 1, 1-16-5e, fsh 2381 ft. Louisiana Pet. Co.'s Binion 1, 22-17-6e, set 6-inch 2283 ft. Oliver et al's Hatch 1, 2-15-5e, set 6-inch 2316 ft. Palmer Corp.'s Colvin 1, 33-17-6e, dr 2290 ft. Ruston Drilling Co.'s O'Neill 1, 36-17-6e, dr 925 ft. Tex-La Carbon Co.'s Broughton 1, 1-16-6e, dk.

SABINE PARISH—Arkansas Fuel Oil Co.'s Logan 2, 28-10-12, lcn; Logan 3, 33-10-12, dk. Emlet et al's Bowman-Hicks 3, 8-7-12, sd 4070 ft; Bowman-Hicks 7, 11-7-14, coring 2465 ft; Sabine Lumber Co. 1, 8-7-1e, dk. Godchaux et al's Giaque 1, 36-5-1e, sd 1518 ft. Magnolia Pet. Co.'s Louisiana Long Leaf 1, 16-6-11, dr 2825 ft. Lewis Clark Pet. Co.'s Wyatt 1, 23-5-12, dr 2925 ft.

UNION PARISH—Camette et al's Tugwell 1, 21-22-1e, sd 740 ft. Clark Creek Oil Co.'s Frost-Johnson 2, 9-23-1e, sd 1162 ft. Rhodes et al's Ftuch 1, 28-23-2w, dr 1125 ft.

WEBSTER PARISH—Davis et al's Lee 1, 22-22-9, coring 2760 ft. Humble O. & R. Co.'s Davis B-5, 23-21-10, dr 3925 ft. Labore et al's Bruner 1, 30-19-10, sd 537 ft. Louisiana Oil Ref. Corp.'s Davis 1, 23-21-10, dr 3395 ft. Ohio Oil Co.'s Bank of Cotton Valley 4, 22-21-10, gassing between 8-inch and 6-inch cas, 4573 ft. Woodley Pet. Co.'s Cox 1, 22-21-10, dr 3675 ft.

WINN PARISH—Dodge et al's Tremont 1, 65-13-3w, sd 1030 ft. Greer et al's Bodcau 1, 9-11-4w, re-setting 10-inch 155 ft, total depth 2183 ft. J. C. Long's Milam 1, 26-13-3w, dr 1385 ft. Ohio Oil Co.'s Edenborne 1, 4-12-1w, to set 6-inch 3957 ft. Standard Oil Co.'s Tremont, 1, 1-12-2w, dr 1875 ft.

Louisiana Gulf Coast

ACADIA PARISH—Mentau Oil Co.'s Iowa Jennings Oil Co. 1, section 41, lcn. Cline, Smith & Cline's Conklin 5, 45-9s-2e, lcn.

ASSUMPTION PARISH — Union Sulphur Co.'s Bank of Paincourtville 1 Napoleonville, dr 700 ft, rock.

CALCASIEU PARISH—Rex Pet. Co.'s Hunter 5, Edgerly, lcn. Standard of La.'s Industrial Lumber Co. 4, Starks dome, sd 1596 ft; Industrial Lumber Co. 5, Starks dome, abn 2417 ft, salt. Union Sulphur Co.'s Fee 720, Sulphur Mines, dr 2060 ft, rock. Border Research Corp.'s Calcasieu Lake 1, set 3584 ft 9¼-inch and cemented. Earle Poole's Castile 1, sd 2615 ft, gumbo.

CAMERON PARISH—Pure Oil Co.'s Sweet Lake 4, Sweet Lake, lcn; Sweet Lake 5, Sweet Lake, lcn. Yount-Lee's School Land 5, Hackberry Island, dr 3980 ft, rock. Border Research Corp.'s Mallard Bay 1, no report; Sabine Lake 1, rigging up. Union Sulphur Co.'s Ellender 2, Hackberry Island, dr 1665 ft, rock.

EVANGELINE PARISH—Texas' Guillory 2, Pine Prairie, fsh dr stem.

JEFF DAVIS PARISH— Elton Oil Co.'s Buller 1, sd 2065 ft, gumbo. Emerson et al's Pierre Comier 1, dr 4100 ft, gumbo. Estropal Oil Co.'s Le Duex 2, dr 1925 ft, sand and shale. Fred Getty's Lacasine Irri 1, sd 2580 ft.

IBERIA PARISH—Gulf's Broussard 1, Eagle Point, dr 610 ft, gumbo; State Z-1, Eagle Point, dr 3100 ft, rock. Union Sulphur Co.'s Schwing 1, Eagle Point, no report; Shaw A-1, dk. Border Research Corp.'s Vermillion Bay 1, dk.

ST. LANDRY PARISH—Bristol O. & G. Co.'s Breaux 1, sd 3015 ft, shale. Farmers O. & M. Co.'s Fontenot 1, sd 3450 ft, shale. Terre Bonne Gas Co.'s Whitman 1, sd 2650 ft, sand and shale.

ST. MARTIN'S PARISH—Rycade's Aatchafalaya 1, sd account high water. Ohio Oil Co.'s Martin 1, sd account high water.

ST. MARY PARISH — Border Research Corp.'s Grand Lake 1, dr 3365 ft. gumbo; West Cote Blanche 1, dk. Pharr-Reed's Avoca Island 1, no report.

EAST FELICIANA PARISH—E. F. Simms' McKeeley 1, sd.

Texas Gulf Coast

AUSTIN COUNTY—Humble's Austin College 1, Raccoon Bend, cutting out liner to deepen 1038 ft; Bellville School 1, Raccoon Bend, gas show in shale 600 ft. R. E. Graves et al's Cleveland 1, Hickory Mound, setting cas 870 ft, gas showing.

BRAZORIA COUNTY—Associated's Seaburn 1, Stratton Ridge, lcn. Gulf's Perry 1, Stratton Ridge, no report. Roxana's Pabst 2-A, Clemens dome, dr 3819 ft, gumbo; Clemens 4, Clemens dome, dr 3279 ft sandy lime; Allen Bernard River 1, Allen dome, bailed salt water and some oil, 36 gravity from 4238 ft; Allen 3, Allen dome, setting 6⅝-inch cas 433 7ft; Reese 1, Allen dome, dr 194 ft, gumbo. Texas' Sweeney 1, Danbury, rigging up.

FORT BEND COUNTY—Sun's Farmer 2, Boling, r 2489 ft. Texas' Farmer 2, Boling, rigging up; Felder 3, Boling, dr 2900 ft, gumbo. Gulf's Beard 3, Long Point, no report.

GOLIAD COUNTY—Houston Oil Co.'s Pettus, 10 miles west Goliad, no report; Parks 2, 8 miles east Goliad.

HARRIS COUNTY—P. S. Griffith's Fee 2, 12 miles north Houston, sd 2425 ft.

JEFFERSON COUNTY—Gulf's Bordages 2, Fannett, sdtk 3709 ft, fsh tools; Bordages 3, Fannett, rigging up. Rio Bravo's T. & N. O. 101 ½ mile north Spindle Top, no rep t. Hines Bros.' Roberts 1, ½ mile east of Spindle Top, dr 3050 ft, salt. Tatum et al's Combest 1, 3 miles north Beaumont, sd. J. T. Miller Drilling Co.'s Edwards 1, Nederland, rigging up. Deep Test Oil Co.'s McFaddin 1, 4 m. northeast Beaumont, fsh dr stem 1450 ft. Edmund trustee Port Acres 1, 2 miles northwest Port Arthur, dk.

LIBERTY COUNTY—Union Sulphur Co.'s Kyle 4, Moss Bluff, rigging up. Barlow et al's Minchcliffe 1, Excelsior, dk, sd.

MATAGORDA COUNTY—Gulf's Sanborn 2, Hawkinsville, dr 3560 ft sandy lime; Parkinson 2, Hawkinsville, fsh tools 1058 ft; Craig 8, Hawkinsville, dr 3675 ft. Sheppard Mott Oil Co.'s Murphy 2, Hawkinsville. Rycade's Meyer 3, Markham, dr 3227 ft, shale; Kountze 4, Markham, stdz 3518 ft. Houston Gulf Gas Co. and John Deering's Gray 1, Markham, sandy shale 3274-3290 ft, oil odor.

WHARTON COUNTY—James Rich-Humphreys Corp.'s Malone 1, 5 miles west Wharton, sd 2008 ft.

West Texas Wildcats

COMPLETIONS

Crane County—
Llano Oil Co.'s M. F. Hampton 1.. * 3201

Jones County—
Gibson-Johnson et al's Mrs. J. V. Wright 1 ..... * 2510

Pecos County—
Mid-Kansas & Transcontinental Oil Co.'s I. G. Yates 2 .....3550 1002

Reagan County—
Camp et al's University 1 ..... * 3030

Upton County—
Skelly Oil Co.'s O. P. Jones 1..... † 3595

DRILLING REPORT

ANDREWS COUNTY—Amon G. Carter & Zweifel's Cowden 1, dr 560 ft. J. S. Cosden et al's Ratliff-Bedford 1, lcn. Calvin-Belt et al's Ratliff-Bedford 1, lcn. Deep Rock Oil Co.'s W. J. Harris 1, lcn. Neff et al's J. S. Means 1, lcn.

BORDEN COUNTY—R. R. Penn and Julian Pet. Corp.'s A. J. Long 1, elevation 3488 ft, top salt 970 ft, top lime 2620 ft, set 6⅝ cas to test show oil 3503-20 ft.

COKE COUNTY—Lipan Oil Co.'s E. C. Rawlings 1, elevation 2738 ft, sd 2740 ft; Connor 1, elevation 2045 ft, spd and sd.

CONCHO COUNTY — Arkansas Fuel Oil Co.'s S. A. Hartgrove 1, making gas, dr 1325 ft. Associated Pet. Co.'s Sam Waring 1, elevation 2085 ft, dr 1965 ft.

CRANE COUNTY—Church & Fields' University 1, elevation 2580 ft, top salt 1100 ft, dr 2410 ft. Bert Weekly & Church's University 1, rig. Carl Cromwell & Jones' University 1, rig. W. E. Duffey-Cuthbert & Penn-Tex. Der. Co.'s Cowden 1, elevation 2552 ft, top salt 1020 ft, dr 2530 ft. Eastland Oil Co. and Collett's University 2, spudding; University 3, 4, 5, 6, 7, and 8, lcns. Gulf Prod. Co.'s Crier-McElroy 5, top salt 966 ft, dr 2385 ft; Crier-McElroy 3-A, fsh 450 ft; J. T. McElroy 6, top salt 2035 ft, fsh 1875 ft; J. T. McElroy 7, top salt 975 ft, dr 1860 ft; McElroy 1-B, rig; Lassiter-University 2, elevation 2603 ft, top salt 1230 ft, top big lime 2893 ft, gauged 120 barrels per hour, then pinched, pay 2964-90 ft; Lassiter 3 and 4, rigs; Lassiter 5 and 6, lcns; Waddell 1-A, core drill, spudding. Humble O. & R. Co.'s University 1, dr 765 ft; University 2, 3, 4, 5, 6 and 7, dks. Independent O. & G. Co.'s University 1, lcn. Magnolia Pet. Co.'s et al's Church 4, top salt 1140 ft, dr 1795 ft; Hardwick 2, rig; Hardwick 3, rig; Hardwick 4 and 5, lcns; Lassiter 2, dr 410 ft; Lassiter 3, rig; O'Keefe 4, top salt 1151 ft, dr 2050 ft; O'Keefe 5, dr 805 ft; O'Keefe 7 and 8, lcns. Marland Oil Co.'s Cowden 2-A, made 30 barrels at 2360-85 ft; Gibbs 2, dr 1345 ft; Hughes 4-C, sd hfw 2460 ft; Hughes 6-D, top salt 705 ft, dr 1560 ft. Marland and F. P. Zoch's Hughes-Keith 3, elevation 2581 ft, top salt 730 ft, testing pay after shot 2340-69 ft. Marland-Keith and McCamey's Cowden 1, lcn; Hughes 2-B, top salt 580 ft, dr by bit 1140 ft. Prairie O. & G. Co.'s University 4-A, elevation 2580 ft, top salt 1140 ft, dr 2815 ft; University 5-A, elevation 2581 ft, top salt 1140 ft, fsh 2210 ft; University 6-A, spudding. Prairie and J. D. Col-

Morrissey Torpedo Company

(INCORPORATED)

THOS. MORRISSEY, President
B. J. SHAW, Vice-president
T. W. MENDENHALL, Gen. Mgr.

FACTORY—Amarillo, Texas.

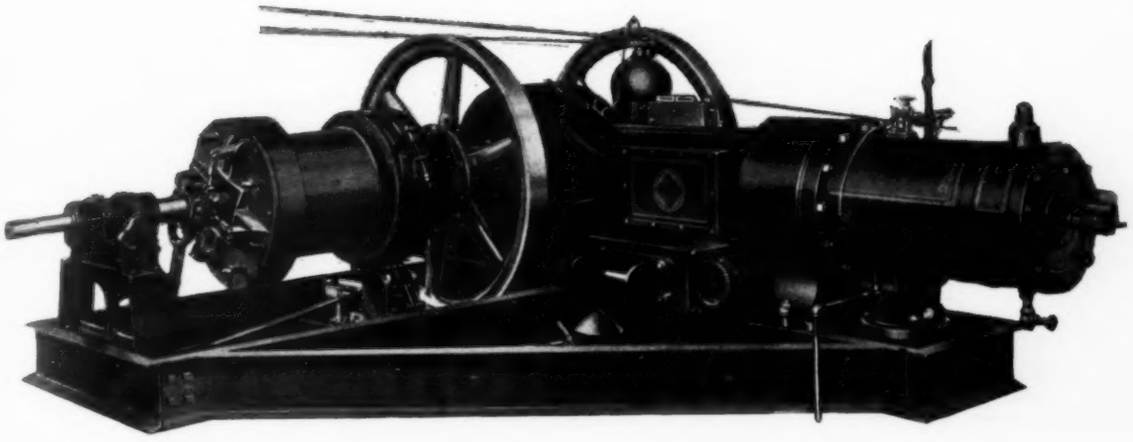
OFFICE—228 Amarillo Bldg., Amarillo, Texas.

MAGAZINES AT—Olney, Texas, Phone 167. Wichita Falls, Texas, Phone 8646. Borger, Texas, Phone 110. Cisco, Texas.

Nitro Glycerine

TORPEDOING OIL AND GAS WELLS

OFFICES:
902 Staley Building Wichita Falls, Texas



For a Quarter of a Century—Piling Up Proof of Power Superiority

SINCE 1902 "PRIMM" Oil Engines have been solving power problems in the United States and Foreign Countries. The greatest achievement of this quarter-century of continued oil engine improvement is the special "PRIMM" Oil Field Drilling Engine with its easy control direct from the derrick, its quick pick-up, snappy getaway when tools drop and the exceedingly low fuel cost.

"PRIMM" Drilling Engines are easily moved to location and do the job right from spudding in to reaming. They're built to last, having semi-steel cylinders, steel cross-head, high point carbon steel piston rods and Manganese crankshafts.

Not the least feature of this wonderful engine is the special "PRIMM" reverse clutch, the smoothest and slickest running clutch on the market today.

There's a special "PRIMM" for the pipe line man which has long been a favorite.

Write for Bulletin 9-SS, Today

THE POWER MFG. CO.

729 Cheney Ave., Marion, Ohio

lett's University 1-B, elevation 2529 ft, top salt 945 ft, top lime 2982 ft, dr dry hole 3625 ft. Simon & Cromwell's Brookfield 1, sd hfw 2570 ft. Simms Oil Co. and Atlantic Oil Prod. Co.'s University 2, elevation 2574 ft, top salt 1125 ft, top lime 2815 or 2840 ft, flowed 300 barrels oil per hour at 2889-2953 ft; University 3-A and 4-A, dks; University 5-A and 6-A, lcns; University 1-B, top salt 1100 ft, dr 1150 ft; University 1-C and 2-C, lcns. Stidham & Thrasher's University 1, elevation 2497 ft, top salt 988 ft, top lime 2752 ft, swabbing oil after shot 100 quarts 2939-65 ft, td 3162 ft; University 2, lcn. The Texas Co.'s King 13, top salt 690 ft, dr 2270 ft; King 18, co after shot, td 2372 ft. Tidal Oil Co.'s University 1-E, elevation 2570 ft, top salt 1093 ft, top lime 2855 ft, set 6⅝ cas 2890 ft; University 1-F, top salt 1085 ft, dr 1855 ft; University 2-F and 3-F, rigs. Henry Zweifel & Hofmeier's Cowden 1, dr by tools, td 2810 ft.

CROCKETT COUNTY—V. T. Bolin & Co.'s P. O. Coates 1, dr 365 ft. Cumberland O. & G. Co. et al's Couch 1, dr 2365 ft. W. W. Donnelly and J. D. Young's Pierce 1, rig. Geo. A. Henshaw & Co.'s University 1, dk. J. K. Hughes Dev. Co.'s Powell 2-B, fsh 2535 ft. Magnolia Pet. Co.'s Shannon 2, top salt 925 ft, top lime 2270 ft, dr hfw 2400 ft. Republic Prod. Co.'s Powell 2, top salt 1140 ft, dr 2510 ft. World Oil Co.'s Will Schneeman 1, dr 620 ft. J. D. Young and Carl Cromwell's University 1, sd 1365 ft; J. M. Shannon 1, top salt 920 ft, top lime 2150 ft, dr hfw 2605 ft.

CROSBY COUNTY—El Capitan Oil Co.'s Slaton 1, dr 740 ft.

CULBERSON COUNTY—Jas. H. Gardner et al's Radford-State 1, dr 192 ft.

JEFF DAVIS COUNTY—Humble O. & R. Co.'s McCutcheon 1, cas parted 3430 ft. J. K. Hughes Dev. Co.'s J. Z. Means 1, fsh 1580 ft; Means 2, lcn.

ECTOR COUNTY—J. S. Cosden et al's Connell 1-A, swabbing oil after shot 90 quarts at 3460-86 ft, td 4002 ft.

FISHER COUNTY—Barbour Oil Co.'s W. A. Cross 1, sd 250 ft. The California Co.'s R. J. Anderson 1, flowing salt water, dr 2820 ft; G. C. Magenheimer 1, dr 2956 ft. Danciger O. & R. Co.'s Lanius 1, dr 2450 ft. Hucony Gas Co.'s Langford 1, sd 2055 ft. Marland Oil Co.'s Hodges-Rochelle 1, dr 1945 ft. Fred Phillips et al's C. M. Webb 1, elevation 1811 ft, top lime 1120 ft, dr 1450 ft. R. W. Rainey et al's Marberry 2, sd 2524 ft. Shamrock Pet. Co. et al's Weller 1, dr 2705. Stearns & Streeter's W. A. Howe 1, dr 860 ft. F. P. Zoch et al's Clayton 1, dr 2620 ft.

GLASSCOCK COUNTY—Marland & Texon Oil and Land Co.'s Settles 1, sd 1005 ft. Marland & Pete Parrish Co.'s Nellie Calder 1, sd 3500 ft. J. S. Merriweather et al's L. S. McDowell 1, lcn. R. H. Penn's W. P. Edwards 1, material. Plateau Oil Co.'s L. S. Bell 1, dr by tools, td 2270 ft.

TOM GREEN COUNTY—Marland Oil Co.'s Llano 1, sd 180 ft.

HOCKLEY COUNTY—El Capitan Oil Co.'s Ellwood 1-A, skid rig.

HOWARD COUNTY—Bristow & Merrick's A. J. Hooks 1, spudding. Fred Carey et al's Chalk 1, dk. Comet Pet. Co.'s H. R. Clay 1, rotary rig. Dixie Oil Co.'s Clay 1, rotary rig. Francis & Brunson's J. W. Furrh 1, lcn. Gulf Prod. Co.'s Otis Chalk 2, fsh 805 ft. Humble O. & R. Co.'s Douthitt 2, sd 645 ft. Lockhart & Co.'s Hyman-Scott 1, sd, td 3220 ft; Otis Chalk 2, dr 1460 ft. Magnolia Pet. Co.'s Hyman-Chalk 2, dr 1260 ft; Hyman Chalk 3, lcn; Mary Chalk 3, dr 680 ft; Mary Chalk 4, machine; Kelly-Chalk 1 and 2, lcns; G. O. Chalk 5 and 6, lcns; Owen-Chalk 5-A and 7-A, lcns; Owen-Chalk 8-A, lcn; Sloan-Chalk 1, rig; Sarah-Hyman 1, dr 1570 ft; Sarah-Hyman 2, dr 470 ft; Sarah-Hyman 3, lcn. Marland Oil Co.'s Bryse 1, elevation 2568 ft, top salt 1285 ft, sd 2835 ft; Otis Chalk 9 and 10, lcns; Otis Chalk 11, set 6⅝ cas 1424 ft; Mary Chalk 1, dr 920 ft; Chalk 3-A, dr 1320 ft; Chalk 4-A, sd 930 ft; Chalk 5-A and 6-A, lcns; Chalk 1-B, sd 1040 ft; Chalk 1-C, dr 210 ft; Chalk 1-D, sd 1128 ft; Chalk 1-E, lcn; H. R. Clay 2 and 3, rigs; H. R. Clay 1-A, sd 1452 ft; Clay 2-A, sd 1474 ft; Clay 1-B and 1-C, rigs; Clay 1-D, lcn; Harding 1, dr 410 ft. Reeves & Apperman's H. R. Clay 1, flowing 50 barrels by heads 1774-76 ft; Clay 2, lcn.

IRION COUNTY—Cashdollar et al's G. J. Bird 1, dr 945 ft; Abe Meyer 1, sd 1670 ft.

JONES COUNTY—Bateman & Campbell's Southard 1, sd 1330 ft. Cole-Hart et al's W. B. Cranston 1, sd 2380 ft. Consolidated Oil Co.'s Armand-Taylor 1, lcn. Garland & Diamond's Glynn 1, lcn. Gibson-Johnson et al's Sears 2, dr 650 ft; C. M. Largent 1, sd 2302 ft. Gillett & Hickey's S. W. King 1, elevation 1650 ft, fsh 2070 ft; M. E. Young 1, sd 1200 ft. Grisham-Hunter & Wildman Pet. Corp.'s Burchfield 1, dr 2660 ft; Williams 1, dr 2085 ft. Hutson-Weaver's Smith 1, spd and sd. Marland Oil Co.'s S. R. Cox 1, dr 3690 ft; Mason-Harris 2, swabbed 132 barrels 33½ gravity oil first 8 hours 3036-39 ft; Larson 1, dr 710 ft. Marsten Oil Co.'s Howell 1, dr 1010 ft. Midwest Exploration Co.'s Thornton 3 and 4, rigs. Mid-Continent Pet. Corp.'s H. Evans 1, sd 445 ft. Vic H. Martin et al's Culberson 1, sd 2560 ft. Muse-Robertson's Manly 1, sd 1705 ft. Stebbins O. & G. Co.'s J. M. Higgs 1, dr 860 ft. W. G. Stough et al's J. P. Willis 1, sd 730 ft. Phillips Pet. Co.'s Mason 1, dr 1025 ft; Joe Winters 3, rig; R. H. Beasley 1, dr 1435 ft; Tessie-Walling 2, dr 1800 ft; Tessie-Walling 3, dr 375 ft; W. I. Thornton 1, dr 1945 ft. Swensondale Oil Co.'s Canton 1, materials. World Oil Co.'s A. W. Clark 1, show gas at 2330 ft, dr 2365 ft; W. H. Lee 1, cas trouble 1275 ft. Zeigler et al's J. W. Reeves 1, dr 645 ft.

KIMBLE COUNTY—Dixie Oil Co.'s Harrison 1, sd 3040 ft.

LOVING COUNTY—Owen-Sloan Oil Co.'s Johnson 1, lcn.

LYNN COUNTY—Hart Oil Corp.'s Edwards 1, sd 1390 ft.

MENARD COUNTY—Clark et al's Kothman 1, sd 425 ft. Elliott & J. R. Lewis' White 1, sd 310 ft.

MITCHELL COUNTY—Magnolia Pet. Co.'s T. L. McKinney 1, lcn; Mary Foster 4, dr 1790 ft; W. W. Watson 2, rig. Teas & Stivers' Hardee 1-A, dr 2055 ft. Morrison & Thompson's Griffin 1, dr 2080 ft.

NOLAN COUNTY—A. G. Malone et al's J. B. Carlyle 1, lcn. McCaskey et al's Pepper 1, rig. Peters et al's W. L. Booth 1, lcn. Stein & Greeben's L. W. Rose 1, lcn. Walford et al's H. D. Simpson 1, lcn. Henry Zweifel & Hofmeier's Longbotham 1, sd water 300 ft.

PECOS COUNTY—Arkansas Fuel Oil Co.'s Manly Holmes 1, lcn. T. R. Cowell's J. C. Trees 1, set 8¼ cas 2340 ft. The California Co.'s Cordova Union Fee 1, dk. Buell-Hagan et al's Southern Life & Batchelor 1, dr 1730 ft;

Core Drilling With Cable Tools . . .

Baker Standard Core Barrel

The recovery of adequate cores with the Baker Cable Tool Core Barrel is practically certain, even in the hardest formations. Operators using it report a high average of core recovered in relation to feet cored, and cores in excellent condition. It will pay you to investigate a core barrel you can count on to give you all the advantages of core drilling.

The Baker Core Barrel will do for you what it has done for others.

George J. Hausen, Inc., Representative
Taft California

BAKER CASING SHOE COMPANY

Export Sales Office:
25 Broadway
New York City

Box L, Huntington Park, Coalinga, California

Mid-Continent Representatives:

B. & A. SPECIALTY COMPANY

220 E. Brady St.,
Tulsa, Okla.

BASCO

312 Keystone Bldg.
Houston, Texas

Every Week We "Cut Out" MORE Wells!

"Cuts" from Mutual Oil Co. well at Orangefield, Texas. 16 clean cuts were made without removing tool from hole.

—Some for "new customers" who we are serving for the first time.

—But most jobs are for "old customers" who KNOW the economy of our service from EXPERIENCE.

IT IS THE "REPEAT BUSINESS" which proves most convincingly that our work IS a SUCCESS. If we did not actually SAVE both time and money in preparing wells for deeper drilling—we would not be working on well after well for some of the largest and most successful oil companies in Texas.

—YOU TOO can profit by our services—let us give you an estimate.

"We Do the Work in LESS Time—at LESS Cost—Than Whipstocking"

J. S. Abercrombie Co.

616-18 West Bldg. **Houston, Texas**

University 1, top lime 1935 ft, dr 2085 ft; McKenzie 1, lcn. Carl Cromwell & Kimberlin's Blackman-Scharff 1, sd 280 ft. Del Rio Synd.'s K. C. & Ft. Stockton 1, dr 745 ft. Kershaw & Livingston's Canno 1, sd 175 ft. Kirby Pet. Co.'s S. Rheinstrom 1, dr 85 ft. Mid-Kansas O. & G. and Transcontinental Oil Co.'s I. G. Yates 2, flowed 3550 barrels 30 degree gravity oil 999-1002 ft; Yates 3, sd 315 ft; I. G. Yates 1-B, crooked hole 430 ft. Texon Oil & Land Co.'s (was Pickrell & Kimberlin) I. G. Yates 1, section 55, testing sand 1255 ft with 600 ft o'h. Quinby Oil Co.'s Bennett 2, sd 1280 ft; Townsite 1, sd 3435 ft.

REAGAN COUNTY — Cope-Dalton et al's White-Moore 1, elevation 2551 ft top salt 1091 ft, dr 2395 ft. Hiawatha Oil Co.'s University 1 elevation 2831 ft, top salt 1380 ft, top lime 3310 ft, dr 4015 ft. Moody Corp.'s Sawyer 1, co after shot 120 quarts at 2580-2685 ft, td 3030 ft. The Texas Co.'s J. D. Suggs 1, rig. Tidal Oil Co.'s University 1, section 20 block 8, lcn. Texon Oil & Land Co.'s University 6, group 2, fsh 3225 ft.

REEVES COUNTY—Deep Rock Oil Co.'s Caldwell 1, run 8¼ cas 1070 ft. Grisham-Hunter Oil Corp.'s State 1, elevation 3250 ft, dr 3445 ft. Humble O. & R. Co.'s T.P. Fee 1-B, fsh 1380 ft. World Oil Co.'s Biggs-Holder 1, fsh 1810 ft.

RUNNELS COUNTY—Associated Pet. Co.'s W. M. King 1, spd and sd. Bell & Moore's Ferguson 1, rig. Hill-Ladd & Yates' McMillan 1, rig.

SCHLEICHER COUNTY—Thomas Gray et al's Ball-Robinson 1, dk.

SCURRY COUNTY—Northwest Co.'s T. C. Stinson 1, sd 3420 ft.

TAYLOR COUNTY—City of Abilene's Fee 1, sd 2265 ft. Gibson-Johnson & Oil Operators Trust's Haines-Hamilton 1, sd repairs 1120 ft; J. F. Hendry 1, lcn. Grisham-Hunter Corp.'s Huddleston 1, dr 1860 ft. Dorning & Perrine's J. A. Hammer 1, rig. Mid-West Exploration Co.'s D. Smith 1, lcn. Noodle Creek Oil Co.'s Alice Rose 1, spd and sd. Sanger O. & R. Co.'s Ike Brown 1, fsh 1660 ft; Cox 1, sd 2375 ft; Gillespie 1, water trouble 2670 ft. World Oil Co.'s J. R. Griffith 1, lcn.

TERRY COUNTY—Kingsland Oil & Potash Co.'s Brownfield 1, sd 1050 ft.

UPTON COUNTY—Gulf Prod. Co.'s J. T. McElroy 1-C, elevation 2795 ft, top salt 1655 ft, set 6⅝cas 2982 ft. Curtis-Hults et al's Giddings 1, elevation 2762 ft, top salt 1515 ft, dr 2655 ft. W. W. Donnelly & Marland Oil Co.'s University 1, elevation 2884 ft, dr 1250 ft. Sartain Oil Co.'s Mrs. C. V. Bull 1, rig burned, td 3300 ft.

VAL VERDE COUNTY—Douglas Oil Co.'s Sellars 1, co 2020 ft. S. A. McCaskey's Sellars 1, sd hfw 2205 ft. O. O. Owens et al's H. Y. J. Mills 1, dr hfw 465 ft. Transcontinental Oil Co.'s Stevenson 1, dr 3630 ft. Williams et al's Holman-McNutt 1, sd 2270 ft.

WARD COUNTY—Marland Oil Co.'s Jennie Sealy 1-A, rig.

WINKLER COUNTY—Champlin Ref. Co. et al's Cowden 1, dr 585 ft. Gibson-Johnson et al's R. A. Leck 1, lcn. Gulf Prod. Co.'s T. G. Hendricks 1, dr hfw 1612 ft. Ed. S. Hill-Ladd & Simon's Amburgey 1, elevation 2995 ft, top salt 1220 ft, dr 2220 ft. Humble O. & R. Co.'s Hendricks 1, lcn; Hendricks 1-A, lcn. Independent O. & G. Co.'s Hendricks 1, dr 930 ft. Llano Oil Co.'s Scarborough 1, dr 620 ft. McCullough & Marland Oil Co.'s Tobe Morton 1, fsh 625 ft. R. S. Matthews et al's Cowden 1, fsh 1225 ft. Pure Oil Co.'s Central State Bank 1, lcn. Richardson & Marland Oil Co.'s Cowden 1, spd and sd. Skelly Oil Co.'s M. M. Leeman 1, rig. Southern Crude Oil Purchasing Co.'s Hendricks 2, rotary, sd 1580 ft; Hendricks 3, rotary rig. F. P. Zoch et al's John Sealy 1-A, ur 6⅝ cas 3525 ft.

San Antonio Wildcats

BEXAR COUNTY — McClanahan No. 1, Sodrock, dr.

CALDWELL COUNTY — United North & South Oil Co.'s No. 1 Kelly, dr; No. 1 Tiller, dr.

DUVAL COUNTY — Associated Oil Co.'s No. 1 Sutherland, dr. Cole Pet. Co.'s No. 23 Benavides, dr below 3000 ft; No. 28, down 3976 ft; No. 30, blk 4, sec 11, set cas at 1710 ft; No. 31, dr below 500 ft; Nos. 32 and 33, dr, being erected. Cintex Pet. Co.'s sec 454, dr. Humble Oil & Ref. Co.'s No. 11 Singer, dr; No. 7 Walsh, dr; No. 5 Schallert, dr; No. 1 Koehler, dr. Humble, Reiter-Foster, sec 144, prep to dr deeper; sec 400, dr below 1400 ft. Houston Oil Co.'s No. 2 Benavides, set cas at 1673 ft; No. 6 Benavides, testing at 1832 ft. O. W. Killam's No. 3 Lopez, dr; Nos. 4 and 5 Lopez, dr. Houston Oil & Sun Co.'s No. 2-B Benavides, prod ¶15 gas at 1682 ft. Magnolia Pet. Co.'s No. 1 Spear, dr; No. 1, sur 21, testing; No. 1 sur 174, dr. George Marshall No. 1, sec 458, testing. Maurer & Duggan's No. 1 Hoffman, dr. Milham's No. 1 King, reported abn. O'Hern & Seacord's No. 5 Benavides, prod 350 bbls at 1757 ft. National Oil Co.'s No. 1 Ball, dr. G. B. Pickett's No. 1, sur 230, dr. Simms Oil Co.'s No. 1 Schallert, dr.

GONZALES COUNTY — Martin Oil Co.'s No. 1 Preston, dr. R. J. Kerchival et al's No. 2 Billings, dk.

JIM HOGG COUNTY—American Well & Prospect Co.'s No. 20 Palacious, blk 2, sur 291, dr. Associated Oil Co.'s No. 1 Holbein, dr; No. 1 Allen, dr; No. 1 Lopez, dr. Andrews Pet. Co.'s No. 1 Bank, dr; No. 1 Palacious, dr. Basher & Maddox No. 1, blk 18, sur 81, dr; Nos. 2, 3 and 4, dr. Collins et al's No. 23, Palacious, dr; No. 9, blk 21, sur 291, dr. Andrews Pet. Co.'s No. 1, Holbein, dr. Grayburg Oil Co.'s No. 13 Weil, prod 40 bbls at 1306 ft; No. 14 Weil, sec 81, dr. Harvey & Maddox No. 1, blk 5, sec 281, set cas at 1051 ft. L. M. Holden's No. 3 Jones, dr resumed. Henne, Winch & Farriss' No. 22 Martinez, sec 276, prod 60 bbls at 2013 ft. Maddox-Humble-Texas's No. 1, blk 17, dr. Merchison & Fain's No. 1 Allen, dr; No. 2 Vela, dr. Magnolia Pet. Co.'s Nos. 24 and 25 Martinez, dr; No. 15 Merchant State Bank, prod ¶1 at 1224 ft; No. 3 Martinez, set cas at 1498 ft prep to dr in; Nos. 16 and 17

NEILAN

Neilan is the trade name of a full line of regulating devices for accurate and positive pressure regulation and the control of liquid levels, which have attained a new high standard of perfection in operation.

The exceptional success of these devices in service is due to more perfect operation through advanced improvements upon previous practice, backed by high quality, modern design, precision manufacture, and integrity of purpose.

A Partial List of "Neilan" Regulating Devices:

- Reducing Regulators
- Back Pressure Regulators
- Casing Head Regulators
- Vacuum Regulators
- Orifice Valves
- Gas Fuel Boiler Governors
- Balanced Lever Valves
- Float Valves
- Supersensitive Vapor Recovery System
- Steam Reducing Valves
- Pump Governors
- Liquid Level Controllers
- Gasoline and Water Separation Controllers
- Steam Traps
- Gasoline Traps
- Air Relief Valves
- Water Reducing Valves
- Altitude Valves
- Cushioned Noiseless Check Valves
- Vacuum Relief Valves

Neilan Pilot Sensitive Reducing Gas Regulator No. 20

Neilan, Schumacher & Co.
641-643 Santa Fe Avenue
Los Angeles, California

Representatives:

Maintenance Engineering Corp., 2000 Harrington Street, Houston, Texas

Pelican Well Tool & Supply Co., Shreveport, La.

"You Can Be SURE of Neilan Products"

Announcing
a change in our offices

FROM

408 Cosden Bldg.

TO

638 Kennedy Bldg.

Schermerhorn Oil Company
TULSA, OKLAHOMA

This Company -

maintains the largest and best equipped storage facilities on the Gulf Coast for the unloading, storing and loading of crude oil in bulk.

SWIFTSURE PETROLEUM COMPANY

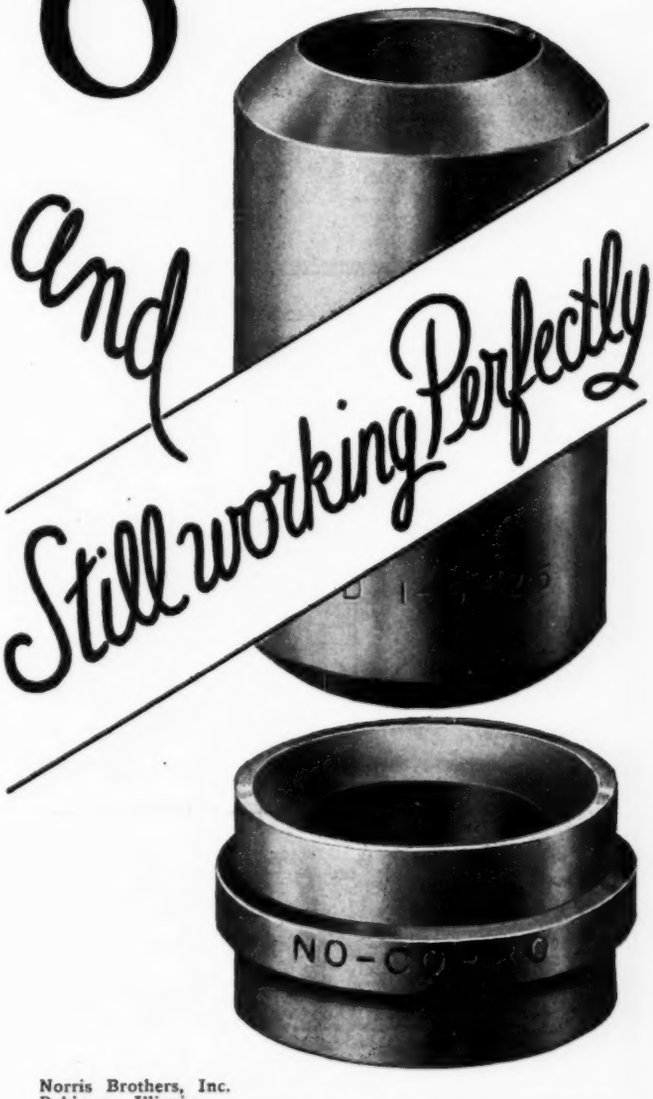
Office:
Second National Bank Bldg.,
Houston, Texas

Terminal and Refinery:
Texas City, Texas

Lasting—

6 times as long - as balls and seats

and Still working Perfectly



Norris Brothers, Inc.
Robinson, Illinois.

Sometime ago, after hearing a great deal of talk among oil producers regarding the wonderful success they were having with NO-CO-RO Drops and Seats, I decided to try them out. I placed several sets of NO-CO-ROS in wells where the best Tool Steel Balls and Seats were lasting only a short time. These NO-CO-RO Drops and Seats have now been in the wells six times as long as any Ball and Seat has ever stood up in the same well and they are still working perfectly today.

We expect to use nothing but your long NO-CO-RO Drops and Seats, as experience shows that they pay for themselves many times over in increased production and saving in pulling expense.

Very truly yours,
(Name on request)

Need we say more . . . After reading this letter and combining it with others we have reproduced, can anyone interested in economical production delay giving this remarkable development a trial? Remember, twice the service of your best Balls and Seats or your money back. Can anything be fairer than that?

Twelve to twenty-four hour service to the Mid-Continent and Gulf Coast fields.

NORRIS BROTHERS, Inc.
Robinson, Illinois, U. S. A.
Mid-Continent Warehouse: Fort Worth, Texas

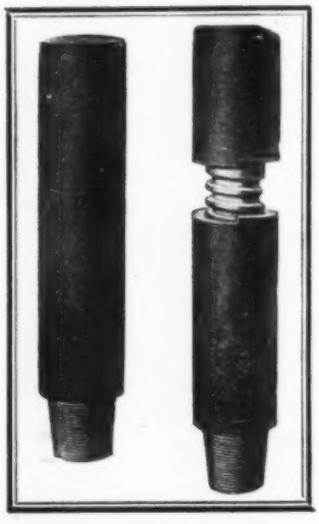
Merchant State Bank, prep to dr. Morgan's No. 1 Palacious, dr. Maddox & Simms' No. 1 Guerra, dr. Maddox & Dauchey's Nos. 1 and 2, sur 281, blk 5, lcn. National Oil Co.'s No. 1 Allen, dr. Rycade-Rydal Oil Co.'s No. 5 Lopez, dr; No. 4 Vela, dr. Ritchison & Livingston's blk 18, sec 287, dr. Simms Oil Co.'s No. 1 Leyendecker, dr. Texas Company's No. 1, section 81, dr.

KLEBERG COUNTY—Humble Oil & Ref. No. 2-A, dr below 2782 ft. Monahaus et al's No. 1, blk 27, dr. Texas Co.'s No. 1, spudded in. Witherspoon Oil Co.'s No. 1, dr.

MEDINA COUNTY — Alamo Drilling Co.'s No. 1 Kenedy, dr. Pat. Armstrong's No. 1 Lacey, dr. Arnett Oil Co.'s No. 4 Nixon, dr; No. 5 Nixon, dr. Carl Switzer's No. 1 Zerr, dr. California-Medina Co.'s No. 1 Rothe, dr. Fennell et al's No. 1, sur 115, dr. Gibson & Walsh's No. 1 Ottem, dr. Ina Oil Co.'s No. 1 Finger, dr. R. R. Lewis' No. 1 Keller, dr. Medina Synd.'s No. 2 Mitchell, dr; No. 2 Adams, prod ¶4 at 904 ft. Swayze's J. A. No. 1 Oeffinger, dr. Western Gas & Fuel Co.'s No. 5 Adams, dr. Witherspoon Oil Co.'s No. 2 Franklin, dr at 750 ft.

WEBB COUNTY—Associated Carson's No. 2 Webster, dr. J. M. Basharaus No. 1 Espjo, dr. Barnsley-Chicago Syndicate's No. 1, blk 19, sec 335, dr. Crown-Central-Rydal's No. 16 Bruni, blk 17, testing. Cresswell & Fallen's No. 1 Gates, dr below 2560 ft. Crown-Central Pet. Co.'s No. 10 Garcia, sur 606, dr; No.s 12, 13, 14 Garcia, dr; No. 20 Bruni, dr. Ellis No. 1 R. Benavides, reaming. R. F. Duggan's No. 1, blk 2, sec 608, setting up tools. Daniels' No. 1 Mesquite, resumed dr. Gibble's No. 1, sur 135, dr. Hamilton & Warner's No. 1 de la Garza, blk 22, dr. Henne, Winch & Killam's No. 1 Billings, sec 43, set cas. Hazlitt-Simmons' No. 1 Vela, sur 267, blk 13, dr. Houston Oil Co.'s No. 2 Benavides, sec 268, dr; No. 1 Benavides-Tying, set cas at 1641 ft. O. W. Killam's No. 1, blk 19, tested salt water, will dr deeper. Magnolia Pet. Co.'s No. 1 Benavides, testing at 1669 ft. Murchison & Fain No. 1 Webster, dr; Nos. 2 and 3 Garcia, dr. M. & N. Drilling Co.'s No. 1 Vela, testing at 2712 ft. George Marshall No. 1 Garcia, dr. Morris Oil Co.'s No. 2, blk 431, dr. T. P. Morgan's No. 1 de la Garza, set cas at 1669 ft. Oil Operators Trust Co.'s No. 5 Garcia, set cas at 1606 ft. Ramsland et al's No. 1 Lopez, dr. Rawlins & Pelton's No. 1 Garcia, waiting on water. St. Alban's, Edward No. 2 Puig, dr. Stroube Brothers No. 1, blk 18, testing. Sun Oil Co.'s No. 12 Bruni, dr. Verdine et al's No. 2, blk 1, sec 2084, prod ¶1 at 1518 ft. Wolcott Pet. Co.'s No. 1 de la Garza, sur 606, dr.

ZAPATA COUNTY—Buffalo-Erie's No. 3 F. Martinez, dr. Charco Rendondo Oil Co.'s Nos. 59, 62, 63, share 2, dr in. Hill & Associates' No. 1 Villa Grant, dr. O. W. Killam, blk 5, sec 69, dr. Duke Langford's No. 1 Charco Rendondo Grant, dr. Howard Staggs et al's No. 1 Hinnants, dr. Mission Oil Co.'s No. 1 Slator, dr.



There's Double Safety in the BAASH-ROSS Safety Joint

Not only does this device enable the crew to loosen a "fish" when all other methods fail—it always permits backing-off if the "fish" cannot be removed, thereby releasing all the fishing string above the fishing tool—washing or other means may then be used to loosen the fish AND connection to fishing tool made again.

This is a sturdy, well built tool of proven merit that should be standard equipment for all rotary rigs. It is designed for use with all fishing tools. Made with either right or left hand threads, in all sizes from 2-inch to 8-inch. Circular on request.

BAASH-ROSS TOOL COMPANY

1613 BOYLE AVENUE LOS ANGELES PHONE DELAWARE 2161 CALIFORNIA

BRANCHES

Long Beach—Brea—Ventura—Taft—Rosecrans

P. O. Box 694, Houston, Texas.

Phone—Preston 4270

Southern California Wildcats

ATHENS—Union Oil Co.'s Mosier, dr 4808 ft.

BANDINI—Pan-American Pet. Co.'s Bandini 1, dr 4900 ft.

BOYLE HEIGHTS — Haskell M. Green's P. A. S. F. 1, idle 1400 ft.

CLEARWATER — Clearwater Pet. Corp.'s Blinn 1A, sd 1400 ft.

CLAREMONT—Claremont Oil & Gas Co.'s No. 1, co 1130 ft.

COYOTE—Bastanchury Ranch Co.'s No. 1, dr 3512 ft.

DAVIDSON CITY—California Well Drilling Co.'s No. 1, dr 4480 ft.

DOWNEY—C. F. Ackers' No. 1, sd 3434 ft.

EAGLE ROCK—Calwin Oil Co.'s No. 1, fsh 6123. ft.

EL SEGUNDO—Southern California Drilling Co.'s No. 1, sd, 4400 ft.

GARDENA—Circle Oil & Gas Co.'s No. 1, sd 3360 ft.

HAWTHORNE—Winwell Oil Co.'s No. 1, sd 5586 ft.

IRVINE—Smith Bros.' Johnson 1, dr 5680 ft.

NEWHALL-SAUGUS — W. W. Castaic's Stabler 1, fsh 3403 ft.

POTRERO—Julian Pet. Corp.'s Smith-Bolger 1, dr 4388 ft. Associated Oil Co.'s Cypress 1, setting cement 4450 ft. Dill Oil Co.'s Cypress 1, building rig. General Pet. Corp.'s Smith 1, rigging rotary. Guiberson 1, lcn; Guiberson 2, lcn; Guiberson 3, lcn. California Pet. Corp.'s Toms 1, building rig. Fred E. Cole's Cypress 1, material on lot. Geo. F. Getty's No. 1, rigged up. Paul Getty's No. 1, building rig. Julian Pet. Corp.'s DeKoch 1, rigging up.

RESEDA—Petroleum Securities' Sesnon 1, dr 5870 ft.

SAN FERNANDO—Standard Oil Co.'s University 1, dr 5390 ft.

SAN JOSEHILLS—D. & B. Oil Co.'s Amar 1, cementing 3560 ft.

SAN JUAN CAPISTRANO — Norswing & Halbertson's Spitz 1, preparing to resume 3892 ft. Edwin W. Robinson's Carr 1, sd 2414 ft.

SUNSET BEACH—General Pet. Corp.'s Lomita 1, dr 4029 ft.

TELEGRAPH CANYON — Quadra Pet. Co.'s M. J. M. 1, sd 4210 ft.

TOPANGO—Standard Oil Co.'s Austin, dr 2151 ft.

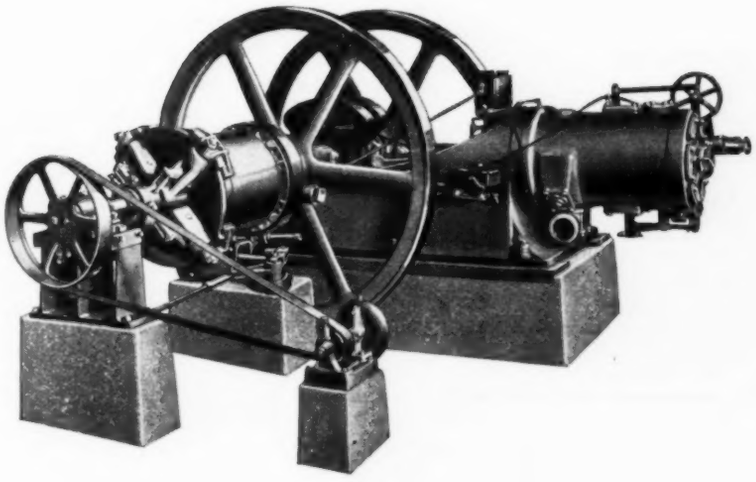
VAN NUYS — Van Nuys Community Oil Co.'s No. 1, sd 3860 ft.

RIVERSIDE COUNTY—Corona Oil & Gas Test's No. 1, sd 1550 ft. Spindletop Oil Synd.'s No. 1, cementing 2615 ft. Trabuco Oil Co.'s No. 1, dr 1921 ft.

SAN BERNARDINO COUNTY—Arrowhead Dev. Co.'s No. 1, sd 1550 ft. Burgess-Goodale-Riggins', ready to test 2600 ft. Colton Terrace Oil Co.'s No. 1, dr 1223 ft. H. & P. Oil Co.'s McCarthy 1, rigging. Hesperia Oil & Gas Co.'s No. 1A, sd 3315 ft. Mahala Oil Gas Co.'s No. 1A, sd 5080 ft. Western Pacific Oil Co.'s No. 3, dr 2767 ft.

SAN DIEGO COUNTY—Cardiff Oil Corp.'s

AXELSON MACHINE CO., *Sucker Rods, Pull Rods, Plunger Working Barrels (Pumps) etc.*— BEAUMONT IRON WORKS CO., *DREADNAUGHT Rotary Drilling Equipment, Water-Cooled Draw Works, Pumping Hoists, Traveling Blocks, etc.* — CARBIC MFG. CO., *Acetylene Gas Generators and Welding Equipment.* — DARLING VALVE & MFG. CO., *Gate and Drilling Valves, Darcova Valve Cups.* — DONOVAN BOILER WORKS, *Oil Country Boilers and Tanks.* — FRICK-REID SERVICE BELTING, *Rubber Covered and Friction Surface.* — JENSEN BROTHERS MFG. CO., *Pumping Jacks.* — NATIONAL TRANSIT PUMP & MACHINE CO., *Power and Steam Pumps.*—PACIFIC OIL TOOL COMPANY, *Hydraulic Pumping Units.* — J. P. RATIGAN, *Grips, Clamps, Beam Hangers.* — JOSEPH REID GAS ENGINE COMPANY, *Gas and Oil Engines, two and four-cycle, Band Wheel and Direct Drive Pumping Powers.*— ROSSENDALE · REDDAWAY BELTING & HOSE CO., *"Camel Hair" Belting, Belt Clamps.*— WHITLOCK CORDAGE COMPANY, *Manilla Cordage, Bull Ropes and Cat Lines.* — LAPWELD AND SEAMLESS TUBULAR GOODS.



REID

TO ALMOST every Oil Man, any attempt to describe a Reid Engine would be like describing his best friend. He might enjoy your opinion and your commendation, but his knowledge of the subject is first hand and authoritative.

The Oil Man knows that for drilling or pumping, there is a Reid Engine built exactly for his requirements, on principles as sound as the law of mathematics.

He knows, too, that Reid Pumping Powers occupy a similar position in the industry, and maintain their position, as do Reid Engines, through absolute and undeniable superiority.

FRICK-REID
SUPPLY CO.

Tulsa, Okla., Pittsburgh, Pa.
West of the Mississippi, Store Everywhere

Turner 1, dr 2026 ft. Oceanside Oil Co.'s Dunn 1, sd 3210 ft. Randall's No. 1, dr 1514 ft. Torrey Pines Oil Co.'s No. 1, sd 428 ft.

Northern California Wildcats

COMPLETIONS

Company, Well and Location	Initial Production Bbls.	Depth
Sespe-Fillmore—		
Gillette-Howard's Grant-Elkins 1	¶30-6	4160
Sonoma County—		
H. N. Witt's No. 1	20	1430

DRILLING REPORT

WARTHAM—Bald Mountain Drilling Co.'s No. 1, sd 950 ft. Progressive Oil Co.'s No. 1, sd 1105 ft.

KINGS COUNTY

KETTLEMAN HILLS — Ahlburg Gasoline Corp.'s No. 1 bldg rig. Bolsa Chica Oil Co.'s No. 1 temp sd 2360 ft. Chanslor-Canfield's No. 1, bldg rig. General Pet. Corp.'s No. 1, dr 2141 ft. Hugh McPhail's No. 1, sd 1972 ft. Milham Exploration Co.'s No. 1, material on ground. South Coalinga Oil Co.'s No. 1, dr 2001 ft.

VENTURA COUNTY

CAMARILLO—Standard Oil Co.'s Camarillo 1, dr 4760 ft.

CASITAS-OJAI — Miley Exploration Co.'s Casitas 2-A, dr 489 ft.

HOPPER CANYON—Bishop-Buckeye Union's No. 2, sd. Hopper Canyon Oil Co.'s No. 1, sd 5006 ft.

MOORPARK-SIMI—E. H. Parkford's Lloyd 1, dr 2000 ft. Shell Co.'s Berlywood 2, sd, cmt, 900 ft.

MONTALVO—Standard Oil Co.'s Montalvo 1, dr 3676 ft.

PIRU—Superior Oil Co.'s Pena 1, dr 2368 ft.

SESPE-FILLMORE—Sespe Oil Co.'s Smith 2, sd 4003 ft.

VENTURA DISTRICT—Associated Oil Co.'s V. L. & W. 1, bailing for test 5959 ft. Chanslor-Canfield's Hobson 1, re-dr 4405 ft; Hobson 2, dr 610 ft. Star Pet. Co.'s Star-Canet 1, dr 3210 ft.

GOLETA—E. J. Miley's Goleta 2, dr 857 ft; Goleta 1, dr 2289 ft; Goleta 3, dr 100 ft.

SUMMERLAND — Summerland Oil Co.'s Becker 1, dr 2641 ft. Channell Oil & Dev. Co.'s No. 1, re-dr 4550 ft. Hollywood Oil Corp.'s No. 1, dr 1100 ft.

KERN COUNTY

ANTELOPE PLAINS—W. H. Davis' No. 1, dr 2141 ft.

BAKERSFIELD—Hoyt S. Gale's K. C. L., dr 2020 ft.

BELRIDGE—Union Oil Co.'s Colm 1, dr 650 ft.

BUTTONWILLOW — Milham Exploration Co.'s Kern 1-A, cmt 2361 ft.

COMANCHE POINT— Kern 29 Oil Co.'s No. 1, sd 2440 ft.

DEVILS DEN—Devils Den Prod. Co.'s No. 4, re-dr 1228 ft. Marathon Oil Co.'s No. 1, dr 4390 ft. Robbins Oil Co.'s No. 1, sd 2280 ft. R. H. Sayers' No. 1, rig.

DELANO — Chanslor-Canfield-Midway Oil Co.'s No. 1, lcn.

ELK HILLS—McAdams Pet. Co.'s test, dr 2340 ft.

GOULD HILLS—A. J. Bomke's No. 1, sd 610 ft. Mendocino-Midway Oil Co.'s No. 1, plugged 6¼-inch 1860 ft. L. E. Westrich's No. 1, dr 1478 ft.

McKITTRICK—Abbott Pet. Co.'s No. 1, dr 1833 ft. Lacy-Esper Pet. Co.'s No. 1, dr 3260 ft. McKittrick Hills Co.'s Vail 2, rigging rotary. Ridge Oil Co.'s No. 1 dr 3410 ft. Sisson-Wisdom's No. 1, sd 970 ft.

SUNSET—Fresno-Sunmaid Oil Co.'s No. 1, sd 4200 ft.

SHALE HILLS — Huntington-Hawthorne's No. 1, sd 40 ft. Nelson & Mulford's No. 1, rigging rotary. Oildale Oil Co.'s No. 1, cmt 557 ft.

TEMBLOR HILLS — Hagar-Deniston-Jones' No. 1, sd 1066 ft. Painted Hills Oil Co.'s No. 1, sd 500 ft.

TEHACHAPI-MOJAVE—John R. Harding's No. 1, r 440 ft.

WASCO—Main Oil Co.'s No. 1, sd 5304 ft; No. 2, sd 5276 ft.

FRESNO COUNTY

CLOVIS—Fresno-Madera Oil Co.'s No. 1, sd 3760 ft. W. W. Taylor's No. 1, sd 2100 ft.

HURON—Associated Oil Co.'s No. 2, dr 2210 ft.

JACALITOS DOME—Marland Oil Co.'s No. 1, dr 2410 ft.

KERMAN—Associated Oil Co.'s No. 2, coring 5070 ft.

RAISIN CITY—Fresno-United Oil Co.'s No. 1, dr 3796 ft.

ORCUTT—West Penn Prod. Co.'s Shields 1, dr 645 ft.

SAN LUIS OBISPO COUNTY — Arroyo Grande Pet. Co.'s No. 1, sd 4250 ft. Barneyberg Oil Corp.'s No. 1, sd 4500 ft. Brinkman Oil Co.'s No. 1, dr 510 ft. Carlisle Oil Co.'s No. 1, sd 2680 ft. Mapes Holding Co.'s No. 1, sd 560 ft. Painted Hills Oil Co.'s No. 1, sd 10 ft. Paso-Robles Gas Co.'s No. 1, sd 500 ft. Paso Robles Oil Co.'s No. 1, sd 1007 ft. Portland Pet. Co.'s No. 1, sd 2920 ft. Waklin Pet. Co.'s No. 1, re-dr 2200 ft. Richfield Oil Co.'s No. 1, foundation for rig.

MONTEREY COUNTY — Harriman-Jones Oil Co.'s No. 1, sd 4616 ft. Petroleum Securities Co.'s No. 1, dr 1311 ft.

TULARE COUNTY—Ducor Drilling Co.'s No. 1, sd 5180 ft. Josephine E. Neame's No. 1, sd 2026 ft. Martin Pet. Co.'s No. 1, sd 1670 ft. Ozena Oil Co.'s No. 1, dr 1620 ft. Wm. C. Resser's No. 1, sd 1815 ft. J. W. Grafford's No. 1, dr 1380 ft.

SAN MATEO COUNTY—Shell Co. of California's Mid-State test, dr 55 ft. Paraffine Oil Co.'s No. 1, sd 725 ft. San Mateo Pet. Co.'s No. 1, sd 610 ft.

SONOMA COUNTY—Shell Co.'s No. 1, dr 3897 ft.

HUMBOLDT COUNTY—Eureka Oil Co.'s No. 1, dr 2400 ft. Humboldt Oil Co.'s No. 1, dr 2285 ft. Northern Counties Co.'s No. 1, dr 500 ft.

Mountain States

WYOMING

Fairway Oil Co.'s No. 1, Crazy Woman Creek, 7-47-82, sd 1151 ft. McPherson Oil

OIL WELL ALCO TOOLS TRADEMARK REG.

ALCO
4-Way Drilling Bit

LOWER COST PER FOOT OF HOLE

Sold in the Gulf Territory by the

Elliott Core Drilling Company

At

Houston, Texas—Beaumont, Texas—Ardmore, Okla. Tulsa, Okla.—Shreveport, La.

Manufactured and sold in California by the

ALCO OIL TOOL CO.

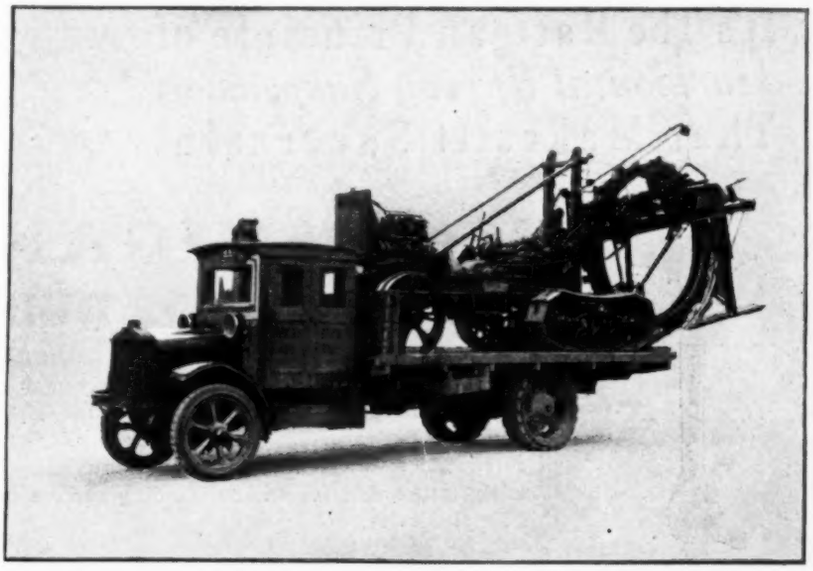
P. O. Box 1188 Compton, Calif.
Cor. Avalon Blvd. and Main St.

"If It's an ALCO Tool It's Modern"

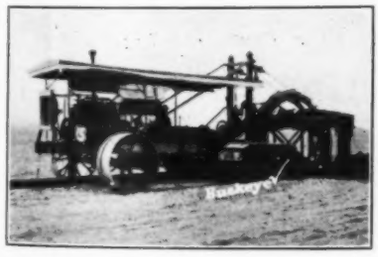
A New Buckeye

"FAST ON ITS FEET"

-on the Job -from one Job to another



It cuts either 11½" wide by 4½' deep or 14½" wide by 5½' deep.



Buckeye No. 3 and 4 Pipe-Line Trench Excavators are larger and have proportionately greater digging ability. They meet all the requirements of heavier oil field service.

For branch and lead lines—for any service where heavy equipment is not required—this new Model 15 Buckeye is ideal.

It has astonishing digging capacity for its size, and its design assures rapid transportation from one job to another.

It is a real Buckeye—built up to every Buckeye standard. It embodies, in improved form, the rugged construction and advanced features developed by thirty-two years Buckeye experience.

The finest steels, over-size power plant, steel-tread Alligator Traction, double-driven cutting mechanism—assure reliable performance and maximum digging ability.

This Buckeye has been thoroughly tested in actual field service. It is now ready for you—if you need a small ditcher that is "fast on its feet."

Mail the coupon for mechanical details and price.

The Buckeye Traction Ditcher Co.,
Findlay, Ohio

We are interested. Send us complete information on your new Model 15 Oil Field Ditcher.

_____

_____

_____

THE BUCKEYE TRACTION DITCHER CO.

FINDLAY, OHIO

Manufacturers of

Pipe-Line Trench Excavators and Pipe-Screwing Machines

There's a Buckeye Sales and Service Office Near You.

Buckeye FOR OVER 30 YEARS

Co.'s No. 1, Sand Draw, 2-44-96, setting 10-inch casing, td 2850 ft. Graybeal Synd.'s No. 1, Graybeal, 16-28-1, dr 2760 ft. Criterion Oil Co.'s No. 1 Douglas, NE¼ 5-31-70, sd 3105 ft. Kinney-Coastal Oil Co.'s No. 1, SW¼ 27-6-3, sd, td not given. Texas Production Co.'s No. 6, Maverick Springs, 26-6-101, comp 1670 ft with production of 675 barrels. Union Oil Co. of California's No. 1B, Black Mountain, NW¼ 28-32-91, dr 2575 ft; No. 1S, Black Mountain, NW¼ 34-43-91, sd for cement to set, td 2350 ft; No. 1, Park County, NW¼ 24-27-101, rig completed; No. 1G, Fremont County, SE¼ 27-1-1, dr 1530 ft; No. 1C, Fremont County, NE¼ 16-5-1, dr 3570 ft. Producers & Refiners Corp.'s No. 5, Big Sand Draw, 10,32-95, dr 3400 ft; No. 7, Big Sand Draw, 13-32-95, dr 2520 ft; No. 1, Medicine Bow, 25-21-79, dr 2315 ft: No. 1, Muskrat, 34-34-92, rig completde; No. 1, Murphy dome, 8-43-91, fsh 2975 ft; No. 1, Tensleep, 13-46-89, rig completed; No. 2, Garland, 24-56-89, sd 2641 ft. Utah Oil Refining Co.'s No. 7, Little Lost Soldier, 2-26-90, dr 1100 ft; No. 6, Little Lost Soldier, 2-26-90, dr 1500 ft. Ohio Oil Co.'s 3, Oregon Basin, 8-51-100, dr 3115 ft; No. 4, Oregon Basin, 8-51-100, sd 2220 ft; No. 1, Corlet dome, 3-43-93, dr 1225 ft; No. 2 Byron, 33-56-97, co 2310 ft. Carter Oil Co.'s No. 1, Nowood, SW¼ 5-48-90, dr 1700 ft; No. 1, Horse Creek, NW¼ 35-17-70, dr 3220 ft; No. 2, Billy Creek, SE¼ 17-43-82, co 4320 ft, td 4386 ft. California Co.'s No. 2, Garland, NE¼ 15-55-97, dr 3640 ft. West Zimmerman Butte Oil Co.'s No. 1, Zimmerman Butte, NE¼ 28-44-93, sd 2785 ft.

COLORADO

Essok Oil Co.'s No. 1, Boulder County, 5-1-70, dr 150 ft. Midwest Refining Co.'s No. 2, Rio Blanco County, 30-2-102, sdtr 2908 ft. Mutual Oil Develepoment Co.'s No. 1, Fremont County, 34-17-70, dr 2910 ft. Texas Production Co.'s No. 2, Rio Blanco County, 31-2-102, dr 2840 ft; No. 1, Moffat County, 27-3-94, dr 3305 ft. Marland Oil Co.'s No. 1, Moffat County, 16-3-91, dr 2420 ft. Offset Oil Co.'s No. 1, Boulder County, 28-7-70, dr 1230 ft. Elkhead Development Co.'s No. 1, Routt County, 22-7-86, dr 1055 ft. Repollo Oil Co.'s No. 1, Boulder County, 33-1-70, dr 4030 ft. E. J. Miley Interests' No. 1, La Plata County, 32-33-12, fsh 3258 ft. Timpas Dome Syndicate's No. 1, Otero County, 29-26-57, dr 650 ft. Foley & Goldworthy's No. 1, Las Animas County, 11-30-69, dr 535 ft. Phillips Interests' No. 1, DeBaca County, 26-34-48, dr 1460 ft.

NEW MEXICO

Exploration Co.'s No. 1, Lea County, 25-19-35, dr 860 ft. San Juan Petroleum Co.'s No. 1, San Juan County, 17-29-13, dr 760 ft. Marland Oil Co.'s No. 1, Eddy County, 11-20-30, lcn. Congress Oil Co.'s No. 1, San Juan County, 34-29-11, dr 1750 ft. Texas Production Co.'s No. 1, Chaves County, 29-17-18, dr 2902 ft. Cap Rock Oil Co.'s No. 1, Lea County, 11-16-32, dr 775 ft. Diamond Oil Co.'s No. 1, Torrance County, 3-3-15, dr 1380 ft. Maljamar Oil & Gas Co.'s No. 1, Lea County, 15-17-32, lcn. Portage Oil & Gas Co.'s No. 1, San Juan County, 34-30-13, dr 1610 ft. Union Oil & Mining Co.'s No. 1, San Juan County, 9-29-9, fsh 2950 ft. Henderson-Dexter-Blair's No. 1, Lea County, 34-17-33, dr 4316 ft. Midwest Refining Co.'s No. 1, McKinley County, 1-17-9, dr 1651 ft. Sun State Petroleum Co.'s No. 1, Union County, 5-30-28, dr 2655 ft. Prairie Oil & Gas Co.'s No. 1, Eddy County, 10-17-31, cementing 8¼-inch cas, td 2866 ft.

UTAH

Boulder Knoll Oil & Gas Co.'s No. 1, Boulder Knoll, 17-34-24, fsh 1755 ft. Empire Gas & Fuel Co.'s No. 1, Gibson, 6-30-21, sdtr 575 ft. Midwest Exploration Co.'s No. 1, Cane Creek, 5-27-21, dr 315 ft. Utah Petroleum Corp.'s No. 1, Gibson, 1-30-20, dr 1230 ft. Embar Oil Co.'s No. 1, Moab, 8-26-22, dr 3060 ft.

East Central Texas Wildcats

COMPLETIONS

Henderson County—
R. H. Smith & F. Heine's Tittle 1 * 3108

Limestone County—
Magnolia Pet. Co.'s J. R. Stroud 4 * 2784

DRILLING REPORT

BELL COUNTY—Stanfield et al's Garrett 1, dr 865 ft.

FALLS COUNTY—Callahan et al's Scott 1, dr 1240 ft. Cranfill-Reynolds Oil Co.'s B. H. Styles 2, Austin chalk at 545-668 ft, sd 915 ft.

FRANKLIN COUNTY—L. E. Trout et al's O. W. Gandy 1, sd 1000 ft.

FREE STONE COUNTY—J. S. Cosden et al's J. E. Woods 1, sd 3790 ft. Payne & Bonds' F. A. Coleman 1, sd 1560 ft.

HILL COUNTY—Killem & Phillips' T. B. Findley 1, lowering cas 515 ft.

HOPKINS COUNTY — Amerada Pet. Corp.'s Jackson-Malone 1, top chalk 2117 ft, dr by bit 2450 ft.

KAUFMAN COUNTY — Barney Carter et al's W. D. Brown 1, elev 353 ft, Austin chalk at 1768-2179 ft, dr shale 2810 ft.

LIMESTONE COUNTY—Alexander-Lyles et al's J. E. Sharp 1, broken chalk 2350 ft, hard chalk 2500 ft, dr 2520 ft. W. K. Clayton et al's Joe Thornton 1-A, Austin chalk at 2725-3124 ft, sd 3310 ft. Magnolia Pet. Co.'s J. R. Stroud 4-A, rig. Pandem Oil Corp. & Harrison's Bassett 1, dr cable tools 3725 ft. E. L. Smith et al's Steubenrauch 1, Trinity sand test, dr 4155 ft. Transcontinental Oil Co.'s Richardson 1, spudding. F. P. Zoch & McCamey's A. P. Maddox 1, rig.

McLENNAN COUNTY—D. H. Byrd et al's Duncan 1, sd 2000 ft. Castleman Creek Oil Co.'s Schaepshearer 1, ur cas to test show oil 1650 ft.

NAVARRO COUNTY—Magnolia Pet. Co.'s Carrie Marshall 1, dr 2855 ft. Meade & Sparkman et al's G. A. Stubbs 1, rig. Sun Oil Co.'s H. A. Swink 1-C, Trinity sand test, on cavey hole 5263 ft. The Texas Co.'s Byron Cheney 1-B, tseted dry in sandy-shale 2963-65 ft. Pruitt 1, sd to abn 1508 ft.

UPSHUR COUNTY — Magnolia Pet. Co.'s G. L. Canon 1, lcn.

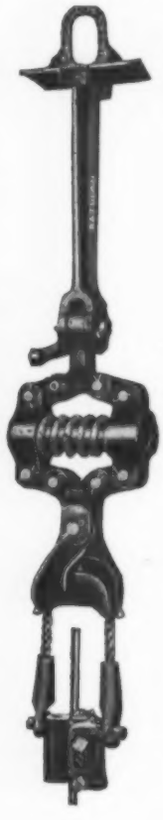
TEXAS PANHANDLE WILDCAT COMPLETIONS

Moore County—
M. Cadman et al's Sneed 1 ..... 35 3240

Potter County—
Amarillo Oil Co.'s Fuqua 1 ..... * 4401

It's The Ratigan Principle of *Horizontal Spring Suspension* That Makes It Successful

RATIGAN "SURE GRIP" GRIPE CLAMPS BEAM HANGERS MIDWEST SOB ELEVATORS SAFETY HOOKS BELL NIPPLES, ETC



The RATIGAN SHOCK ABSORBER

The Ratigan Shock Absorber is the only spring device of this type that ever has proved completely and positively successful. And the Ratigan principle of compound leverage horizontal spring suspension is solely responsible for the outstanding success of this simple device.

The design and construction of the Ratigan Shock Absorber is such that the spring does not carry the weight of the string. The spring absorbs the shocks of pick-up and reversing. And the strain, or shock, on the spring is a "pull" which compresses the spring horizontally, giving it almost six times the maximum load capacity that it would have if the strain was a direct vertical pull.

The sustaining parts of the device are of sufficient strength to hold the longest string of rods, with an ample factor of safety. It simply cannot fail.

The simplest shock absorber ever developed—and the most successful. Saves thousands of dollars in time and production on every well.

J. P. RATIGAN

1213 Santa Fe Avenue, Los Angeles, California

Mid-Continent & Rocky Mountain Fields: Frick-Reid Supply Company

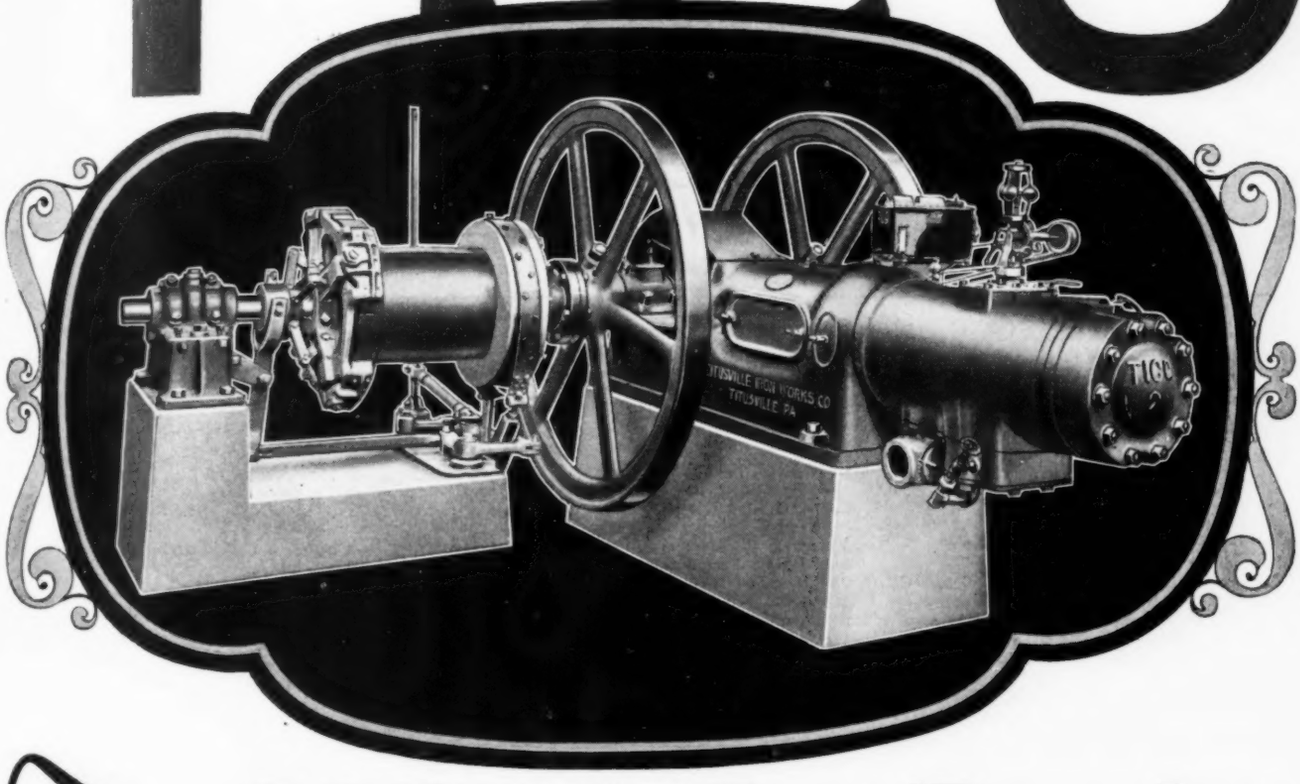
East of the Mississippi All Supply Houses

Pacific Coast Fields: All Supply Houses

Export Agent: Oil Field Equipment Co., Inc., 30 Church St., New York City

If it's a *"Sure Grip"* it's *Sure Safe*

TICO



The Oil Field's Most Popular Gas Engine

—because (1) it is the easiest starting of all 2-cycle gas engines, (2) it is exceptionally simple, strong, durable, accessible, (3) it has ample power and flexibility for drilling, swabbing, pumping, pulling casing, and every other production job, (4) horse power developed during sustained pulls under trying conditions has been more than 100% over rated capacity. Sizes: 25, 30, 35 and 45 H. P.

The ACME Reversible clutch has contributed materially to TICO'S success. Cool operation is insured by its hollow spindle, and the flood lubrication of gearing and bearing. Its faster speed in reverse than in forward is of special value in drilling, swabbing and pulling. Special Heavy Duty model, 18x18 operates on Timken Roller Bearings, and can be used with all sizes of Tico Engines.

"If CONTINENTAL Sells It, There Is No Better."

THE CONTINENTAL SUPPLY COMPANY

General Offices: St. Louis

Export Office: 2 Rector St., New York

London Office: 316-317 Dashwood House, Old Broad St., London E. C. 2, England

CONTINENTAL

Say you saw it in The OIL WEEKLY

PERMITS GRANTED FOR NEW WELLS

Weekly Comparison of New Wells

Following is a condensed table giving a comparison of permits or locations made for new wells during the past year in Kansas, Oklahoma, Arkansas, Louisiana, Texas, California and the Mountain States:

	Week Ending Feb. 12	Previous Week	Total This Month	Total This Year	This Week Last Year	This Month 1926	Total Same Date 1926	Year Total 1926
Arkansas	3	9	12	53	11	39	130	940
California	30	31	61	194	34	65	236	1,273
Louisiana	16	15	31	114	37	60	170	1,318
Kansas	26	26	52	195	31	55	244	1,745
Oklahoma	78	72	150	700	85	156	618	5,165
Texas	284	177	461	1,546	176	322	1,231	12,158
Mountain States	6	13	19	72	...	...	...	....
Total	443	343	786	2,874	374	697	2,629	*22,599

*Mountain States omitted.

ARKANSAS

Ouachita County—Simms Oil Co.'s J. E. Murphy 7, 28-15-15, NEc NW¼ SW¼.

Union County—Hollifield et al's Giller 17, 10-16-15, 150 ft W and 650 ft S of NEc NE¼ SE¼. Mounty et al's Pratt 6, 8-18-15, center of south line NW¼ NW¼.

LOUISIANA

Acadia Parish—Mentau Oil Corp., Jennings, Iowa Jennings Oil Co. 1, 41-9s-2w, 2736 ft S and 797 ft E of NW corner of section.

Bossier Parish — Magnolia Petroleum Co., Slattery Bldg., Shreveport, Ida Dodson 1, 15-23n-12w, 330 ft N and 330 ft E of SW corner of SW ¼of SE¼. Norton & Clark, P. O. Box 1039, Shreveport, Ford 1, 32-23n-13w, 200 ft S and 200 ft W of NE corner of NW¼ of SW¼.

Caddo Parish — Shreveport Oil Corp., 1017 Slattery Bldg., Shreveport, State 1, 28-21n-15w, 510 ft N and 1440 ft E of SW corner of NW¼. Woodley Petroleum Co., P. O. Box 1163, Shreveport, Muslow 3, 32-21n-15w, 200 ft N and 200 ft E of SW corner of SW¼ of SW¼.

Calcasieu Parish — Gulf Ref. Co. of La., Drawer "C", Houston, Texas, Gardner-Noble Gray 67, 33-10s-12w, approx 239 ft S and 40 ft E of NW corner of NE¼ of SE¼. Rex Pet. Corp., Orange, Texas, Hunter 5, 21-9s-11w, 475 ft N and 540 ft E of SW corner of SE¼. Vacuum Oil Company, Esperson Bldg., Houston, Texas, Farquhar 5, 9-10s-9w, 850 ft S and 250 ft E of NW corner of NE¼ of SW¼; Miller 10, 9-10s-9w, 250 ft N and 1370 ft E of SW corner of NE¼. Vinton Petroleum Co., Orange, Texas, Gray-Rescue 13 acres 6, 33-10s-12w, 239 ft S and 37 ft W of NE corner of NW¼ of SE¼.

Cameron Parish— The Union Sulphur Co., Sulphur, Little 1, 29-12s-10 w, 560 ft N and 402 ft E of SW corner of SE¼ of NE¼.

Grant Parish—Gulf Ref. Co. of La., Shreveport, L. C. Swope et al A-3, 8-9n-1e, 200 ft N and 200 ft W of SE corner of SW¼.

Morehouse Parish—Standard Oil Co. of La. Shreveport, Interstate Cooperage Exp. 3, 9-19s-8e, 200 ft S and 270 ft E of NW corner of SW¼.

Red River Parish — Gulf Ref. Co. of La. Shreveport, E. T. Robinson 37, 25-13n-11w, 2178 ft N and 1589 ft W of SE corner of section.

Sabine Parish—Arkansas Fuel Oil Co., Ardis Bldg., Shreveport, Logan Oil Co. 2, 28-10n-12w, 350 ft N and 300 ft W of SE corner of SW¼ of SE¼; Logan Oil Co. 3, 33-10n-12w, 300 ft S and 275 ft E of NW corner of NW¼ of NE¼.

CRANFILL BROTHERS
OIL COMPANY

CRANFILL BROTHERS
DRILLING COMPANY

Dallas and Wichita Falls, Texas

MOUTAIN STATES

UTAH

Union Oil Co. of California's No. 1, NW¼ 16-30-25.

NEW MEXICO

Marland Oil Co.'s No. 1, SW¼ 11-20-31. Texas Production Co.'s No. 1, SW¼ 34-16-31. Stone Interests' No. 1, 25-7-2.

COLORADO

Continental Oil Co.'s No. 518, SE¼ 34-18-70. Griffith-De Laat's No. 1, 17-16-65.

CALIFORNIA

Dominguez—Shell Co.'s Reyes 38, 34-3-13.

Huntington Beach — Higgins & Dutton's Bundy 1, 10-6-11. Ahlburg Oil Corp.'s Lee 9, 10-6-11; Mills 6, 10-6-11. San Martinez Oil Co.'s T. W. 1, 10-6-11. J. H. McMahon's No. 1, 10-6-11. Prudential Oil Corp.'s No. 2, 10-6-11.

Inglewood—Standard Oil Co.'s Stocker 10, 16-2-14.

Kern River—Wonder Co., Ltd.'s No. 1, 23-29-27. General Pet. Corp.'s No. 21, 14-28-27.

Kings County—Milham Exploration Co.'s Elliot 1, 2-22-17.

Long Beach—Delaney Pet. Corp.'s No. 5, 29-4-12. United Oil Co.'s Hass 12, 19-4-12.

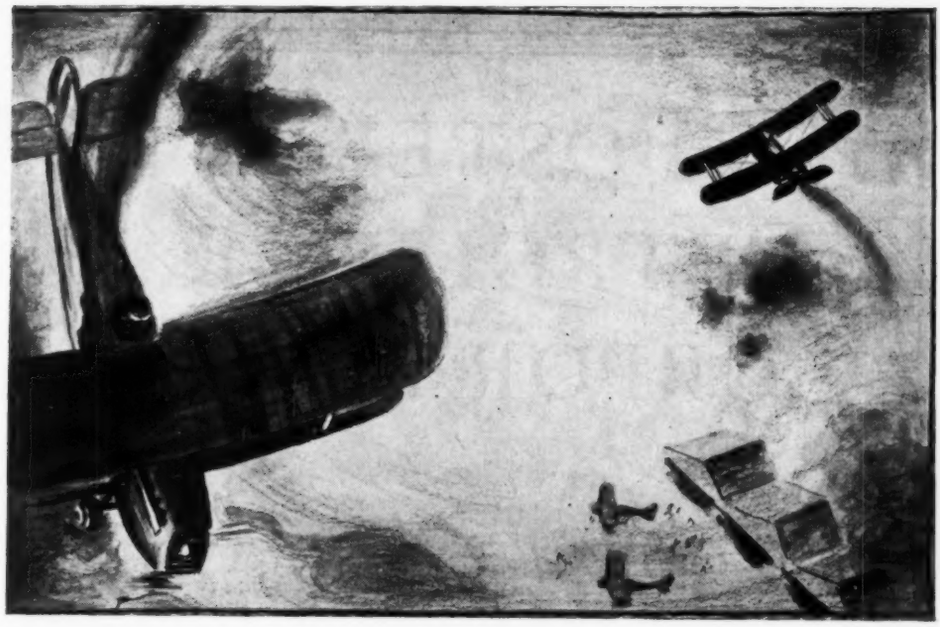
Midway—Standard Oil Co.'s No. 46, 29-31-24; No. 10, 9-32-24; No. 24, 7-32-24. Honolulu Consolidated Oil Co.'s No. 5, 8-32-24.

Richfield—Continental Oil Co.'s No. 5, 33-3-9. Union Oil Co.'s Stern 6, 33-3-9. Delaney Pet. Co.'s No. 4, 27-3-9.

Rosecrans—General Pet. Corp.'s Smith 1, 35-2-14.

San Luis Obispo County—United Oil Co.'s Wreden 1, 10-29-17.

Seal Beach—Marland Oil Co.'s Bixby 12, 3-5-12. Standard Oil Co.'s San Gabriel 12, 18-5-



Ball retaining type washer keeps balls in place.

When the Air Mail lands

A roar . . . the mail plane glides to earth . . . letters from New York have crossed the country in less time than Grandfather heard from the boy in the city, sixty years ago.

Day and night . . . snowstorms . . . fog . . . rain . . . always the same. The Air Mail Service is built on dependability, the same dependability that is found in the Burns Tubular Temper Screw. On tools in every part of the world its superiority has been proven.

Be sure of continued long life and ease of operation—use genuine Burns parts.

TEMPER BURNS SCREW

BURNS *Tool Company*

OKMULGEE - OKLAHOMA

Say you saw it in The OIL WEEKLY

FOSTER PETROLEUM CORPORATION

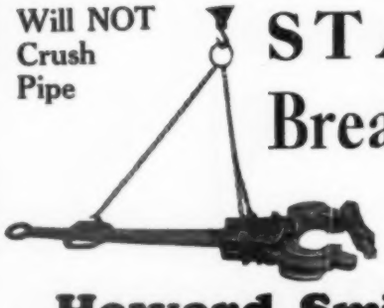
Producers of

PETROLEUM
NATURAL GAS *and*
NATURAL GASOLINE

Bartlesville, Okla.

H. V. Foster, *Pres.* Burdette Blue, *V. Pres.*
Paul F. Dahlgren, *Treas. and Gen. Mgr.*

Will NOT Crush Pipe



STANCLIFF Break-Out Tongs

—Grip quickly
—Hold perfectly
—Release instantly
—Reverse without turning over.

Howard Smith Company
806 Walnut St., Houston, Texas

12. Associated Oil Co.'s Bryant 4, 11-5-12; Bryant 6, 11-5-12.

Sespe—R. F. Labonge's Star 6, 1-4-20.

Summerland—Smith & Barmore's No. 4, 4-26.

Ventura—Associated Oil Co.'s Lloyd 50, 27-3-23. Shell Co.'s Edison 14, 28-3-23.

KANSAS

Butler County—Powell et al's No. 1 Soute, in the northeast corner of the southwest of 25-24-7e. Phillips Petroleum Co.'s No. 1 Beedles, in the southwest corner of the southeast of the northeast of 8-27-6; Empire Gas & Fuel Co.'s No. 5 Worrell, in the southeast corner of the northwest of the southeast of 12-27-7. Roth & Co.'s No. 10 Hanna, in the northeast corner of the southwest of the southeast of 33-28-8.

Chase County—Sheedy et al's No. 2 Atyeo, in the southeast of the northeast of the northeast of 36-31-9.

Coffey County—Sheedy et al's No. 1 Young, in the center of the southwest of 11-23-12.

Cowley County—T. B. Slick No. 4 Dibbons, in the southwest corner of the northwest of the northeast of 22-32-4. McNabb et al's No. 2 Wallace, in the northeast corner of the southeast of the northeast of the northwest of 22-32-4. Wakefield et al's No. 1 Townsite, in the northeast corner of the southeast of the southeast of the northwest of 22-32-4.

Elk County—Roth & Co.'s No. 1 Erickson, in the northwest corner of 27-28-8.

Greenwood County—Syndicate Oil Co.'s No. 7 Bradfield, in the northeast corner of the southeast of 2-22-10. Theta Oil Co.'s No. 18 Browning, in the northeast corner of the southeast of the northwest of 17-22-10e. Sinclair Oil Co.'s No. 53 Browning, in the center of the east half of the southeast of 19-22-10. Sinclair Oil & Gas Company No. 55 Browning in the center of the east line of the southeast of 19-22-10; No. 56 Browning, in the center of the east half of the northwest of southwest of 20-22-10; No. 56 Browning ,in the center of the west line of the southwest of the southwest of 20-22-10e; Stark et al's No. 1 Hind, in the southeast corner of the northwest of 11-22-11. Empire Gas & Fuel Co.'s No. 36 Teter, in the southeast corner of the northwest of the southeast of 16-239. Elmwood & Parker's No. 1 Hale, in the southeast corner of the northwest of 12-23-10. Mid-Kansas Oil & Gas Co.'s No. 34 Martindale, in the northwest of the northeast of the northeast of 31-23-10. Haverhill Petroleum Co.'s No. 17 Inthurm, in the center of the north line of the south half of the southeast of 4-23-13. Jennings et al's No. 1 Whipple, in the northeast corner of the southeast of 30-25-11.

Harvey County — Kansas Central Oil Co.'s No. 1 Sowder, in the southwest corner of the northwest of 3-21-3.

Lyon County—Theta Oil Co.'s No. 8 Jones, in the southeast corner of the northwest of the northwest of 30-21-10.

Sedgewick County—Marland Oil Co. et al's No. 1 Schmitz, in the northwest of the southwest of the southwest of 5-28-1.

Sumner County—Vickers & Johnson No. 2 Shore, in the southeast corner of the northwest of the southeast of 24-31-2. Roxana Petroleum Corp.'s No. 3 Shore in the northwest of corner of the northeast of the southeast of the southeast of 34-31-2.

OKLAHOMA

Beckham County—Northland Synd. No. 1 Davis, in the southeast corner of the northwest of 24-9-23.

Caddo County — Magnolia Petroleum Co.'s No. 5 Lacky, in the northeast corner of the southeast of the northwest of the northwest of 11-5-9. Belle Hedlund No. 1 Fee, in the southeast corner of the northeast of the northeast of 11-5-9.

Carter County — Magnolia Petroleum Co.'s No. 5 G. Cox, in the southeast of the southwest of the northeast of 16-2-2; No. 5 May Cox, in the northeast of the northwest of the southeast of 16-2-2. Schermerhorn et al's No.

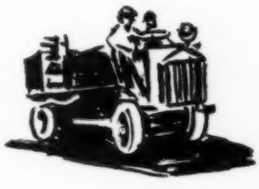
The 14 big advantages Halliburton cementing presents—

1 Provides a permanent and safe seat regardless of formation.

2 Protects casing against external pressures to such an extent that a Halliburton-cemented casing *has never been known to collapse.*

3 *Prevents corrosion* by keeping highly mineralized fluids away from casing.

4 *Prevents shifting formations* by forming a tight seal between wall of hole and casing.



5 Forms a permanent dam against upper stratas so that there can be no migration of fluids from one strata to another.

6 Protects casing when shooting—without the necessity of lifting it 300 to 400 feet as ordinarily required.

7 Shuts off bottom water.

8 *Forms an absolute and everlasting protection from upper water.*

9 Makes it possible to set casing any distance from bottom, even though gas pressure is present.

10 Allows pulling of extra strings of casing—particularly important in cable-tool holes.

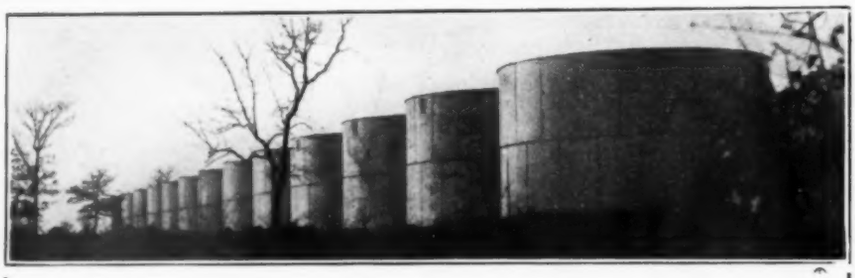
11 Brings gas blowouts under control.

12 Controls flow of gas when gas is used to stimulate production of oil [detailed information on this phase gladly given on request] and effectively kills gas wells too wild to be brought under control.

13 Detects sources of casing leaks, locates them and positively eliminates them.

14 Repairs split casing.

HALLIBURTON
OIL WELL CEMENTING CO.
Duncan •• Oklahoma



1500 BBL. MALONEYS, SEMINOLE

MALONEY Tanks have enjoyed wide demand in connection with the important developments in the Seminole district. The above battery consists of twenty 1500 barrel Maloneys on the Rentie Lease of the Midcontinent Petroleum Company.

Preference for MALONEYS is explained by their record for durability, economy, and tightness. They are constructed of rust-resisting Keystone Copper Steel. Seams are reinforced by means of metal strips and channels.

Tightness is assured by our patented "crimp" at seams and joints, and by our especially developed rubber packing and Gaso Cement. Large Cleaning-out plates are set flush with bottoms. Valve and thief-hatch equipment is the best the market affords.

Howell Aluminum "3 in 1" Vacuum Pressure Valve and Thief Hatch—
The BEST and LATEST Deck Equipment—POSITIVE Safety

THE MALONEY TANK MFG. CO.

Tulsa, Oklahoma

MADE OF KEYSTONE COPPER STEEL

Distributors at All Principal Petroleum Points
Sizes 12 to 3,000 Bbls.

Packed in Steel-Bound Crates for Export

MADE OF KEYSTONE COPPER STEEL

MALONEY

Conservation of Gas and Oil Means Economical Production

One of the most important acts of the A. P. I. at Tulsa was the adoption of a resolution approving recommendations of the Conservation Board; that the prevention of waste of gas is of paramount importance in the conservation and economical production of oil.

Shaffer Adjustable Flow Bean

The Shaffer Adjustable Flow Bean positively controls the flow of gas and oil from a producing well, throttling it to any desired pressure and rate of flow, without breaking the oil or gas stream. Orifice opening instantly adjustable to 1/100-inch by hand wheel control. Saves gas, increases production, prolongs flow-life of well. Eliminates waste of gas and oil. Improved orifice permits greater and smoother flow with less turbulence. Not a "plug" control. Full details and flow data on request.

SHAFFER TOOL WORKS

Brea, California, U. S. A.

Distributed By

Robt. N. Atmore Co.
Tulsa, Okla.

Robt. J. Miller Co.
Houston, Texas

Sold by Leading Supply Houses.

2 Calvery, in the southwest corner of the southeast of the southwest of 2-2-3. Humble Oil & Ref. Co.'s No. 11 Jordan, in the southeast of the northwest of the southwest of 18-1-3.

Creek County—Tom Turner et al's No. 1 Penoke, in the northeast corner of the southeast of the southwest of 9-16-12; Dixie Oil Co.'s No. 4 Francis, in the northwest corner of the southeast of the southwest of the northwest of 5-17-10. Drew Oil & Gas Co.'s No. 1 Strip, in the southeast corner of the northeast of the southeast of 32-19-11. Sherry et al's No. 1 Unallotted, in the center of the south line of the north half of the southeast of 2-19-9. Plymouth Petroleum Co.'s No. 1 Traser, in the northeast corner of the southwest of the northeast of 10-18-11. The Texas Co.'s No. 1 R. Lucas, in the southwest corner of the southeast of the northeast of 31-15-9. Gray Oil Co.'s No. 1 Withers, in the northeast corner of the northwest of the southeast of 1-14-10. Magnolia Petroleum Co.'s No. 1 Coker, owd, in the northwest corner of 16-18-7.

Grady County — Nicholas & Page's No. 1 Drake, in the center of the east line of the southeast of 7-5-7. Empire Gas & Fuel Co.'s No. 1 Thomas, in the southwest of the northeast of the northeast of 19-15-7. Meridian Gas Co.'s No. 1 Ramsey, in the center of the northeast of the northeast 10-4-8. Amerada Petroleum Corp.'s No. 2 Hicks, in the southwest of the northwest of the southeast of 16-3-5. Carter Oil Co.'s No. 5 Walford, in the southwest corner of the southeast of 16-3-5. Garvin Drilling Co.'s No. 2 Stacy, in the northeast corner of the southwest of 16-3-8. Carter Oil Co.'s No. 1 White-Eagle-Polson, owd, in the northwest of the northeast of the southwest of 27-3-5.

Grant County—Blackwell Oil & Gas Co.'s No. 4 Lane, in the southeast corner of the northeast of the northeast of the northeast of 22-27-3.

Jefferson County—Tweed & Leach, No. 1 Barnett, in the southeast corner of the northwest of 9-6-7.

Kay County—Marland Oil Co.'s No. 1 J. A. Miller, in the center of the east line of the southwest of 9-25-2. Comar Oil Co.'s No. 1 McCullough, twin, in the southwest corner of the southeast of 5-28-1; No. 1 Dowd, in the northwest corner of the southwest of 4-28-1. Marland Oil Co.'s No. 2 White, in the northeast corner of the southeast of the northwest of 17-29-1. Comar Oil Co.'s No. 8 Priboth, owd, in the southeast of the northeast of the northwest of 21-29-1; No. 10 Priboth, twin, in the northwest of the southeast of the northwest of 21-29-1; No. 1 Priboth, twin, in the southeast corner of the northwest of 21-29-1; No. 5 McCormick, twin, in the northeast corner of the northwest of the southeast of the 21-29-1; No. 15 Duncan, in the center of the southeast of the southwest of 2-129-1; No. 1 Duncan, twin, in the northeast corner of the southwest of 21-29-1; No. 7 Buell, twin, in the southeast of the southwest of the northeast of 21-29-1.

Muskogee County—W. R. Summerville No. 2 Dinwiddie, in the southeast corner of the northwest of the northeast of 17-15-17; No. 3 Warrior, in the southwest corner of the northeast of the northeast of 17-15-17.

Okfuskee County — Darby Petroleum Co. & Atlantic Oil Producing Co.'s No. 1 Manwarring, in the southeast corner of the northwest of the southwest of 16-13-10. Cromwell Oil & Gas Co.'s No. 2 Rogers, in the southwest corner of the southeast of 8-12-7.

Okmulgee County—Carey Jennings' No. 4 Gaither, in the northwest corner of the southeast of 111-13. Sam Bright No. 10 Stake, in the center of the west line of the southeast of the northwest of 25-13-14. Gray Oil Co. et al's No. 4 Peloche, in the center of the southeast of 23-15-12. L. C. Wheeler et al's No. 2 Jackson, in the center of the southeast of the southeast of 33-15-12. Devonian Oil Co.'s No. 3 Adams, in the center of the west

Going up

JARECKI Sales of Cast Iron Fittings Higher in 1926 Than Ever Before.

Never in our 74 years of existence has so large a tonnage of JARECKI Cast Iron Fittings been ordered as in 1926.

The reason is readily found. JARECKI was acquiring metallurgical knowledge long before Colonel Drake dropped anchor at Titusville. It has been gaining it ever since. All cast iron used in JARECKI fittings is made in modernly equipped foundries under supervision guided by three-quarters of a century of experience. As a result, it is peculiarly close grained—surprisingly free from ordinary cast iron imperfections—strictly uniform as to quality.

On cast iron fittings, as on malleable fittings—the JARECKI diamond "J" is a small thing to look for but an important thing to find. The JARECKI store in your neighborhood will supply you.

Jarecki

MANUFACTURING COMPANY

Home Office and Factory—Erie, Pa., U. S. A.

General Office, St. Louis, Mo.

Branch stores at all important places in the Oil Country.

District Offices { Pittsburgh, Pa.; El Dorado, Kan.; Tulsa, Okla.; Newark, Ohio; Eastland and Dallas, Texas; Lawrenceville, Ill.

Latest Lightning No. 3 Pumping Power

The Lightning No. 3 power is similar to our No. 2, but is more powerful and a higher-grade machine throughout. Inverted drive gear forms its own guard. Rod lines actuated by broad-faced eccentric, same as used on band wheel power delivers a full 18-inch stroke. Main eccentric shaft 4 1/2-inch diameter, supported at both ends. Hub has bearing 17 inches long, lubricated by a positive acting plunger pump which draws oil out of the base and delivers it into the top of the eccentric hub. This oil also is fed into the eccentric and passes back into the base and is used over again. The engine is also equipped with a positive lubricating system of its own.

WEIGHT

Belt Drive—24 to 28-inch pulley, 280 to 300 R. P. M. ....2700 Lbs.

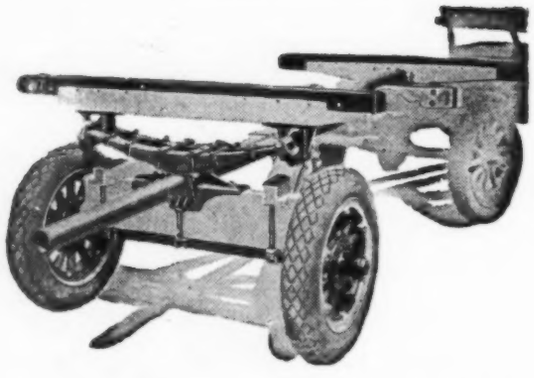
Engine Power—12 H. P., direct connected, Madison Kipp Lubricator . .....5550 Lbs.

Manufacturers of
Pumping Powers, Geared and Band Wheel.
Steel Grips.
Polished Rod Rotators
Casingheads
Polish Rod Clamps
Rod Racks
Balanced Pumping Jacks
Centrifugal Pumps
Beam Yoke Castings for Wire Line Hangers
Beam Hangers
Sucker Rod Spiders
High Speed Elevators
Stuffing Boxes
Hooks and Grips

DISTRIBUTORS:
Grover C. Johnson. Wichita Falls, Texas.
B. V. Emery & Co. Tulsa, Okla.
Mid-Continent Supply Company Fort Worth, Texas
Harry B. Shine. Houston, Texas.
All Republic Supply Stores.
All Putnam Supply Co. Stores.
All International Supply Co. Stores

Write for showing of full line

Kansas City Hay Press Co.
Oil Field Supplies. Kansas City, Mo.



Nabors Trailers at Home

Oil men from many sections now investigating Louisiana's newest field in Sabine Parish will be delighted to learn that Nabors Trailers are manufactured only twenty miles from this field.

For in the oil fields is where Nabors Trailers strut their stuff with a vengance.

Sold Through Authorized Truck Dealers

W. C. Nabors Co.
Mansfield, La.

line of the northeast of the northeast of 4-14-12.

Osage County—Sand Springs Home Oil Co.'s No. 1, in the southwest corner of 22-20-10. Ganrett Oil Co.'s No. 1, in the southwest corner of the southeast of the southeast of the southeast of 3-25-9; No. 1, in the northeast corner of the northwest of the southwest of the southwest of the southwest of 2-25-9.

Payne County—Shaffer Oil & Refining Co.'s No. 1 Little Chief, in the northwest corner of the northeast of 4-18-5. Roxana Petroleum Co.'s No. 1 Stover in the southwest corner of 13-19-4, owd.

Pawnee County—Sheridan Oil Co.'s No. 1 LeMaster, in the northwest corner of the southwest of the southeast of 17-20-10e. Magnolia Petroleum Co.'s No. 5 Vogler, in the southeast corner of the northeast of 32-20-6. George Baker No. 1 Cave in the northeast of the northwest of the northwest of 10-20-6.

Pottawatomie County — Magnolia Petroleum Co.'s No. 2 Bryant, in the southeast of the southwest of the northwest of 9-9-5.

Seminole County—T. B. Slick's No. 1 Cudjo, in the southwest of the northeast of the northeast of 28-7-7. Independent Oil & Gas Co.'s No. 1 Palmer, in the southeast corner of the southwest of 30-7-6. Simmona & Bean's No. 1 Palmer, in the northeast of the northwest of the northeast of 7-7-6. Magnolia Petroleum Co.'s No. 6 Jones, twin, in the southwest of the southeast of the northwest of 32-8-8. Marland Oil Co.'s No. 1 Harjoche, in the southwest corner of the northwest of 19-8-7. Independent Oil & Gas Co. and Marland Oil Co.'s No. 1 Johnson, in the northeast corner of 28-8-6. Indian Territory Illuminating Oil Co.'s No. 3 Youngblood, in the southwest of the northwest of the northwest of 24-8-6. Independent Oil & Gas Co. and Marland Oil Co.'s No. 1 Coker, in the northeast corner of the southeast of the northeast of 21-8-6. Carter Oil Co.'s No. 1 McGeisey, in the northeast corner of 21-8-6. Atlantic Oil Producing Co.'s No. 5 Jones, in the northeast of the southeast of the southeast of 16-8-6; Atlantic Oil Producing Co.'s No. 4 Jones, in the southwest of the northeast of the southeast of 16-8-6. Pure Oil Co.'s No. 14 Reed, in the southeast of the northeast of the southwest of 14-8-6. Pure Oil Co.'s No. 13 Reed, in the southwest of the northwest of the southeast of 14-8-6; No. 12 Reed, in the northwest of the southwest of the southeast of 14-8-6. Empire Oil & Gas Co.'s No. 5 Lacey, in the southeast of the southwest of the southwest of 14-8-6; No. 4 Lacey, in the northeast of the southwest of the southwest of 14-8-6. Independent Oil & Gas Co.'s No. 2 Jefferson, in the southwest corner of the northeast of 7-9-8. Jarvis & Holms No. 1 Adams, in the southeast of the northeast of the northeast of 11-9-7. T. B. Slick's No. 3 Giblet, in the northeast corner of the southeast of 35-9-6. McCullough Oil Co.'s No. 3 Butler, in the northeast of the southeast of the northeast of 35-9-6. Atlantic Oil Producing Co.'s No. 4 Cudjo, in the southwest of the northeast of the southwest of 35-9-6. Indian Territory Illuminating Oil Co.'s No. 7 James, twin, in the northwest of the southwest of the southeast of 24-9-6. Magnolia Petroleum Co.'s No. 5 Sparks, in the southwest corner of 11-9-5. Empire Gas & Fuel Co.'s No. 1 Edmonson, in the southeast corner of the southwest of 3-9-5. Carter Oil Co.'s No. 4 Stewart, in the northeast of the northwest of the northwest of the southwest of 34-10-6, owd.

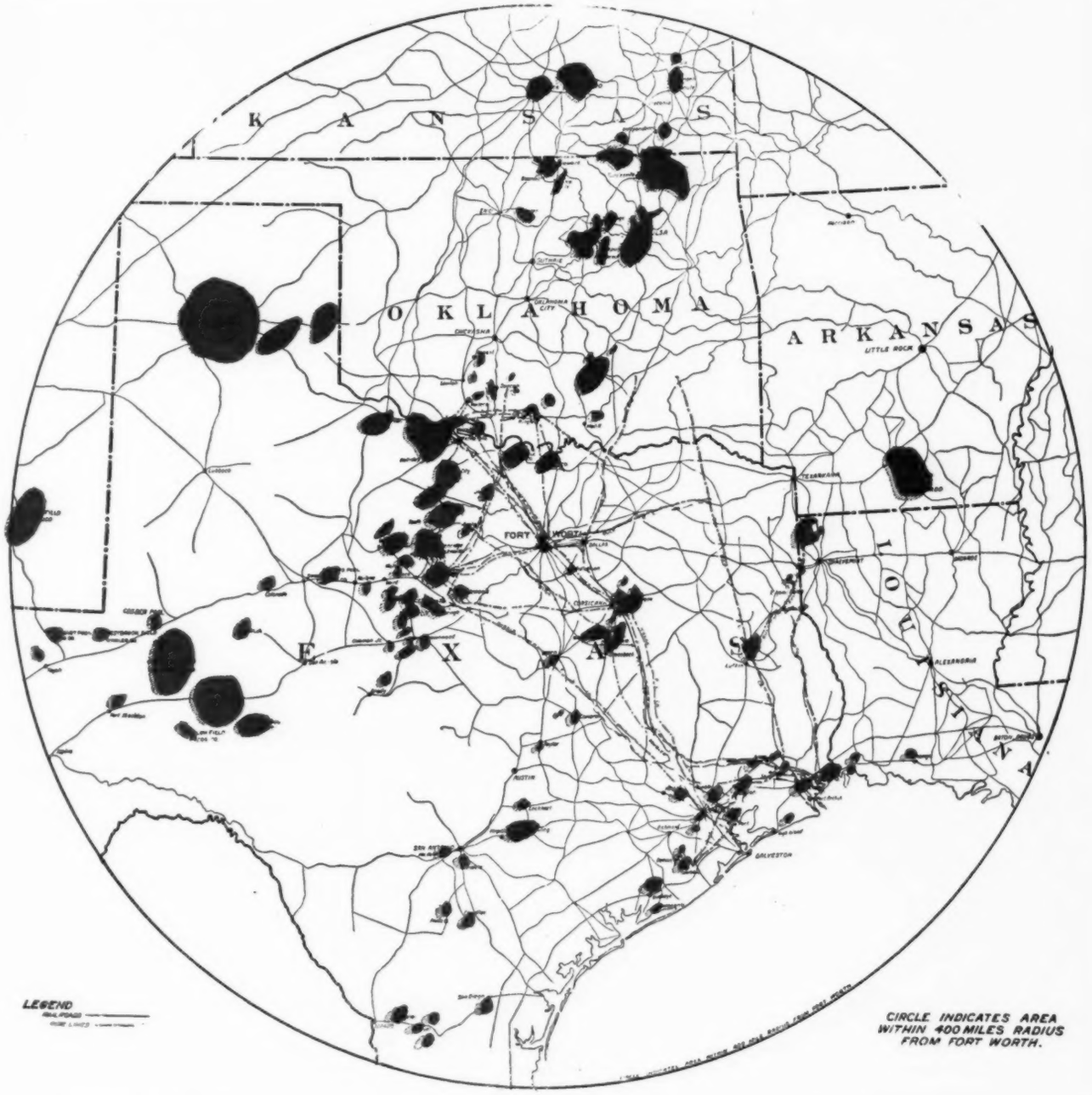
Tillman County—P. C. Dean McDowell & Lewis' No. 1 Deaner, in the center of the southeast of the southeast of 21-3-16.

TEXAS

Archer County — Magnolia Petroleum Co., Dallas, A. J. Lowe 32, I. Holman sur, 300 ft W of No. 30. Dorian & Peterson, Perkins-Nail sur, 500 ft to E and 8110 ft to S lines, Snider Bldg., Wichita Falls, H. Taylor 1, A. Marland Oil Co., W. T. Waggoner Bldg., Fort Worth, Ward A3, 1379, TE&L sur 300 ft S of No. 1A. Gwynn-Kisk Oil Co., Hervey-Snider Bldg., Wichita Falls, D. L. Wolf 2, G. W. Mills sur, 340 ft S of No. 1; 3, 336

FORT WORTH

Center of the Southwestern Oil Fields



FIRST CLASS OFFICE SPACE AVAILABLE

Every Field Can Be Reached Over Night From Fort Worth

FORT WORTH CHAMBER OF COMMERCE

Say you saw it in The OIL WEEKLY

NATIONAL Drill Pipe
NATIONAL Rotary Pipe
NATIONAL California Casing
NATIONAL Tubing
NATIONAL Line Pipe
WALWORTH PIPE FITTINGS
WALWORTH VALVES, ETC.
AMERICAN WIRE LINES
WILLIAMS RAPIDUCTION THREADING MACHINE

Big stock of Oil Field Supplies carried in our warehouses for your convenience. Send us your orders or write today for prices and information. *"We Ship Quick"*

THE LARGEST SUPPLY HOUSE IN THE SOUTHWEST

PEDEN IRON & STEEL CO.

HOUSTON – SANANTONIO – SHREVEPORT

Hook Open

Self Closing and Locking

The weight of the Elevator CLOSES and LOCKS it *AUTOMATICALLY*. It positively CANNOT OPEN until released by hand pressure on the handle which is protected from opening from any accidental contact.

The
B&A

Safety
Rod Hook

A Safety Hook that IS safe

Hook Closed

No Projecting Points

Nothing to catch in the Derrick Girts.

Rugged and Strong

Weighs only twenty-five pounds, but *perfectly balanced* and *heavy enough* for the longest string of rods or light strings of tubing.

Enclosed Ball Bearings

220 E. Brady St. B. & A. SPECIALTY CO. Tel. 3-3282
TULSA, OKLAHOMA

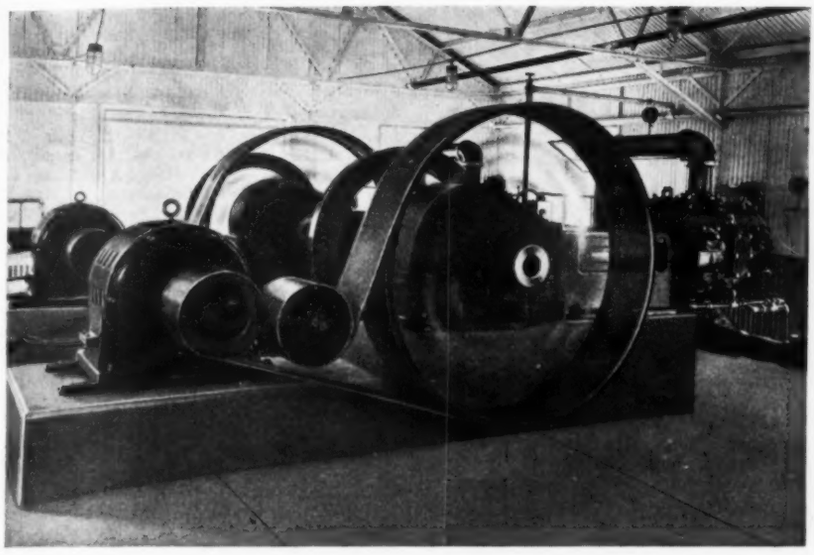
3t W of No. 1. Bridwell & Heydick Oil Co., Wichita Falls, C. L. Abercrombie 11, S 2, S P Ry sur, 50 ft E of No. 9. Simms Oil Co., Magnolia Bldg., Dallas, Burnleson-Turbeville 7, B 142, R. Carson sur, 25 ft E of No. 5. J. W. Neland, Box 1666, Wichita Falls, P. Browning 2, 87-88, TE&L sur, 150 ft to W and 235 ft to S line. Plains Production Co., Staley Bldg., Wichita Falls, C. R. Seals 1, Club Ranch sur, 150 ft to N and E lines. R. L. Lyle 1, B 2, S P Ry sur, 510 ft to W and 450 ft to S line. L. T. Burns, First Natl. Bank Bldg., Wichita Falls, J. H. Turbeville 4, S 142, R. Carson sur, 300 ft E of No. 2; 5, 269 ft to N and 150 ft to W line; 6, 350 ft N of No. 2; 7, 350 ft N of No. 4. Simms Oil Co., Magnolia Bldg., Dallas, J. Turbeville A16, S 172, R. Carson sur, 1050 ft to S and 150 ft to E line. Petroleum Prod. Co., Wichita Falls, J. H. Turbeville 13A, R. Carson sur, 265 ft N of No. 11. Marland Oil Co., W. T. Waggoner Bldg., Fort Worth, J. H. Turbeville 19, S 172, R. Carson sur, 150 ft to W and 1050 ft to S line; 18, 150 ft to W and 1050 ft to S line.

Andrews County—Maer & Staniforth, Wichita Falls, W. A. Meador 1, S 15, School Lands sur, 320 ft to S and E lines.

Brown County — E. N. Schaffner, Cross Plains, E. Hensen 3, 300 ft S of No. 1. Rex-Tex Oil Co. and Py-Texa Oil Co., Brownwood, J. H. Frey 11, S 622, G. Stubblefield sur, 600 ft to W and 500 ft to S line; 10, 189 ft to N and 200 ft to W line; 5, 200 ft to W and 1350 ft to S line, 8, 400 ft N of No. 5; 7, 200 ft to W and 1050 ft to S line; 9, 400 ft N of No. 8. Texas Co., Cisco, H. Byler 1, S 43, T&NO sur, 150 ft to S and 1296 ft to W line. Mexana Oil Co., Brownwood, R. M. Low 1, S 155, J. M. Baker sur, 1230 ft to W and 750 ft to S line. Cranfill & Reynolds, Cisco, W. B. Davis 1, S 103, C. E. Jackson sur, 1370 ft to W and 150 ft to S line. J. S. Cosden, Inc., Fort Worth, J. T. Arledge, 6, No. 150 N. B. Mitchell sur, 350 ft W of No. 5. Humble Oil & Ref. Co., Cisco, J. T. Hodnett 7, J. M. Harris sur, 150 ft to N and W lines. Barbara Oil Co., Box 664, Oklahoma City, E. Metts 5, S 2, Marr sur, 1392 ft to W and 187 ft to S line; C. Willis 3, S 2, SA&G sur 400 ft E of No. 1. Inland Oil Co., Brownwood, C. Willis 1, S 3, SA&MG sur, 150 ft to N and W lines. G. E. Fagg et al, Cisco, T. Butler 1, S 5, J. McGloin sur, 540 ft to W and 150 ft to S line. Hurley Oil Co., Alexander Bldg., Abilene, J. D. Visart 2, J. D. Robinett sur, 150 ft to S and W lines. C. M. Becker, Southern Hotel, Brownwood, A. A. Martin 1, S 44, H&TB sur, 400 ft N of center of S line. Sinclair Oil & Gas Co., Fort Worth, J. H. Fry 9, S 622, G. Stubblefield sur, 200 ft to W and 1464 ft to S line; 10, 200 ft to W and 1902 ft to S line; 15, 200 ft to E and 1350 ft to S line; 5, 200 ft to E and 950 ft to S line; 11, 550 ft to S and 464 ft to W line; 12, 550 ft to S and 464 ft to E line; 13, 200 ft to N and W lines. L. D. Loofburrow, 408 Milton St., Brownwood, M. M. Humphrey 1, S 12, HT&B sur, 422 ft to W and 330 ft to S line. Shadbolt & Creighton, Cisco, L. Stewart 1, S 24, HT&B sur, 250 ft to N and 150 ft to W line. Brown County Dev. Co., Box 212, Brownwood, Windham 2, N. B. Mitchell sur, 2600 ft to E and 250 ft to S line. Amerada Petroleum Corp., Cisco, J. H. Fry 20, G. Stubblefield sur, 588 ft to N and 200 ft to E line; 19, 438 ft S of No. 20; 31, 150 ft to N and 200 ft to E line. Cranfill & Reynolds, Cisco, Stone & Willis 1, J. Rushing, 150 ft to N and E lines. M. E. Wakefield et al, Cross Plains, J. P. Newton 4, B 2, N. B. Mitchell sur, 300 ft S of No. 2; 3, 300 ft S of No. 1; 5, 150 ft to S and W lines. Texas Co., Cisco, W. N. Pugh 10, J. C. Pugh sur, 1016 ft to E and 150 ft to S line; R. Hickman 16, 783, T. Benson sur, 300 ft E of No. 12; W. J. Pugh, 9, J. C. Pugh sur, 150 ft to N and W lines. Becker & Sorelle, Box 14, Breckenridge, A. A. Martin 1, S 44, J. E. Hulse sur, 330 ft to S and E lines. Barbara Oil Co., Oklahoma City, A. E. Metts 2, S 2 Marr sur, 200 ft to S and W lines; 3, 306 ft E of No. 2. Magnolia Petroleum Co., Dallas, A.

Wagner, Quality Motors

For Gas Lift Apparatus



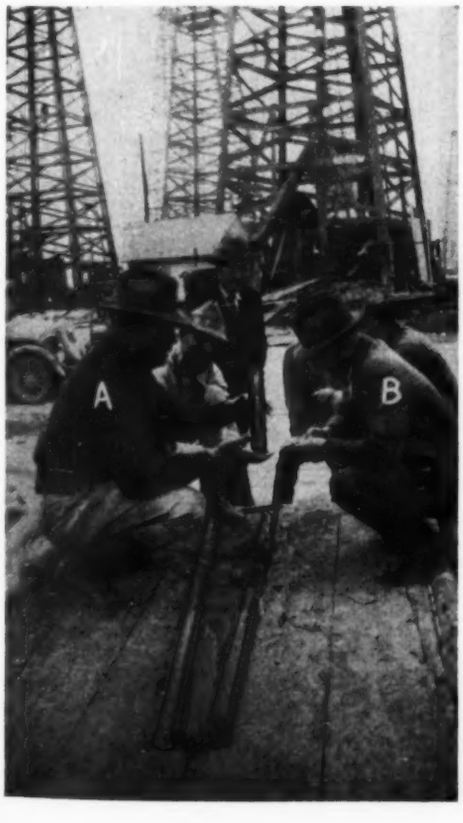
Two 100 Horsepower, 900 R. P. M. Wagner Motors
Driving Gas Compressors

OIL FIELD SPECIALISTS AT:

Los Angeles, California
San Francisco, California
Dallas, Texas
Houston, Texas
Tulsa, Oklahoma
Kansas City, Missouri
Pittsburgh, Pennsylvania

RELIABLE
STAUNCH
HEAVY DUTY
EFFICIENT
MOTORS

WAGNER ELECTRIC CORPORATION, 6400 Plymouth Ave., St. Louis, Mo.



Who's Who and What's What on this

10,000-ft. Test

THIS is Yount-Lee Fee No. 17 in Spindletop, and is the only well ever spudded in for a 10,000 foot test. The center of interest in the picture is the 6 foot core just removed from the split liner of our Perfection Core Barrel. This Core shows the exact formation at 5500 feet and is the fourth Core taken on this well, each time with 100% recovery.

The man in the foreground with the "A" on his coat is Mr. D. B. McDaniel, Contractor. Directly across from him, designated by the letter "B," is Mr. E. T. Rothwell, Vice-President and General Manager of the Yount-Lee Oil Company, owners of the well. And you have probably guessed that the chap directly behind Mr. McDaniel, wearing the million dollar smile, is "Cotton" Russell, the driller who took the Core.

These men like the Perfection Core Barrel because it is 100% efficient, and because the split liner, easily removed, permits the Core to be examined without disturbing it.

Oil City Iron Works, Inc.

MANUFACTURERS OF
PERFECTION CORE BARRELS
SHREVEPORT, LA.

TO BETTER SERVE YOU

THE demand for Gott Water Cans throughout the oil fields has forced us to increase our present facilities.

In our new enlarged plant the now famous quality of the Gott Water Can will be constantly maintained by the latest manufacturing methods.

For Sale At Your Supply Store

Gott
Water Can
Clean-pure sparkling water ready to drink at all times. No matter where you are, the GOTT Water Can is health insurance.
Comes in 1½, 3, 5 and 10 gallon sizes. Your supply store has them.
H. P. GOTT MFG. CO.
WINFIELD, KANSAS
PURE WATEP
Gott
WATER CAN

GOULDS PUMPS

Pumps for All Pipe Line and Refinery Service

Catalogs and Bulletins on request

GOULDS PUMPS, INC.
Seneca Falls, New York

1001 Second Natl. Bk. Bldg.
Houston, Texas

216 Alexander Bldg.
Tulsa, Okla.

E. Metts 2, S 2, SA&MG sur, 800 ft N of No. 1.

Brazoria County—Associated Oil Co., First Natl. Bank Bldg., Houston, Seaburn Heirs 1, J. E. Groce sur, 410 ft to N and 50 ft to W line.

Callahan County—Manhattan Oil Co., Abilene, Young 13, S 129, BBB&C sur, 265 ft N of No. 10; 12, 265 ft S of No. 11. States Oil Corp., Eastland, F. Ingram 2, S 320, S P Ry sur, 250 ft to S and W lines. Humble Oil & Ref. Co., Cisco, A. Hickman 1, S 2, I&GN sur, 2750 ft to N and 150 ft to W line. H. H. Shaw, Baird, J. C. Crutchfield 1, J. C. Crutchfield sur, 150 ft to N and W lines. Moutray Oil Co., Cisco. J. A. Flores 13, S 149, BBB& C sur, 300 ft W of No. 2. J. M. Flores 1, S 149, BBB&C sur, SE corner; 13, 600 ft E of No. 6. St. Mary's Oil & Gas Co., Moran, Texas, S. M. Eubanks 11 S, 2287 TE &L sur, 175 ft to S and E lines. C. A. Waid, Cisco, Texas, R. D. Williams 8, 2269 TE&L sur, SE corner. Graham & Leash, Moran, Texas, E. J. Eubanks 9 S 4, D&D Asy. sur, 300 ft S of No. 4. Moutray Oil Co. Abilene, Texas, J. M. Flores 12, S 149, BBB&C sur, 300 ft N of No. 11. J. G. Weiler et al, Cross Plains, Texas, H. Beasley 3, B 41. T&D Asy. sur, 150 ft to N and 450 ft to W line.

Carson County—McMann Oil & Gas Co., Tulsa, Okla., Bryan 5, S 107, B 4, I&GN sur, 330 ft to S and W lines; 6, S92, 330 ft to N and 250 ft to W line; Percival 1, S 199, B 3, I&GN sur, 330 ft to N and E lines; 2, 330 ft to N and W lines; Noel 1, S 198, B 3, I&GN sur, 330 ft to S and W lines; Bryan 2, S 92, B 4, I&GN sur, 250 ft to E and 300 ft to S line; 3, S 107, 330 ft to S and E lines; 4, S 92, 330 ft to N and 250 ft to E line. The Texas Co., Cisco, Texas, C. McConnell S 66, B 4, I&GN sur, 330 ft to N and E lines. Gulf Production Co., Fort Worth, Texas, J. L. Noel 2, S 198, B 3, I&GN sur, 330 ft to N and W lines. R. R. Osborne, Box 1206, Pampa, Texas, Percival 1, S. 199, I&GN sur, 330 ft to N and W lines. Gulf Production Co., Ft. Worth, S. B. Burnett 21, S 106, B 5, I&GN sur, 1320 ft E of No. 2. Marland Oil Co., Fort Worth, Texas, J. W. McConnell 1, S 67, B 4, I&GN sur, 330 ft to S and E lines. Prairie Oil & Gas Co., Ranger, Texas, J. W. McConnell 4, S 67, B 4, I&GN sur, 330 ft to S and E lines; 3, 330 ft to N and 1646 ft to E lines; 2, 338 to N and 1646 ft to E lines; 2, 338 ft to N ft to N and E lines; J. W. McConnell 1, 330 ft to S and W lines; 2, 330 ft to S and E lines.

Castro County—Gulf Production Co., Fort Worth, Texas, S. Clements 1, S 27, B M10A, Seale & Morris sur, 330 ft to S and W lines.

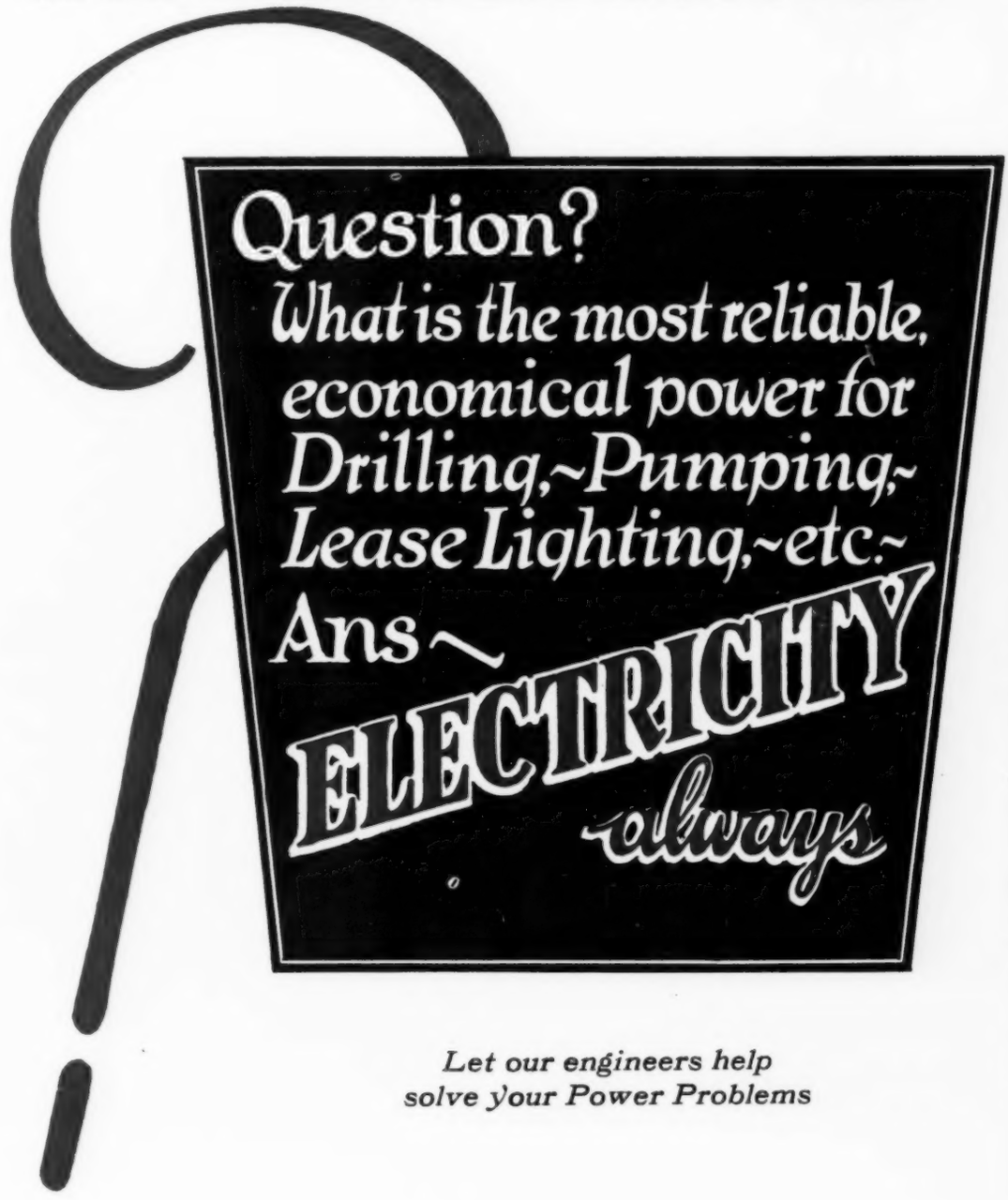
Crane County—Magnolia Petroleum Co., Dallas, Texas, Hardwicke 5, S 38, B 30, Univ. Lands sur, 330 ft to S and W lines; 4, 330 ft to N and E lines. O'Keefe 6, S 38, B 30, Univ. Lands sur, 660 ft W of No. 7; 7, 330 ft to N and E lines; 8, 660 ft E of No. 2. Humble Oil & Ref. Co., Wichita Falls, Texas, University 3, S 38, B 30, Univ. Lands sur, 660 ft S of No. 1; 2, 330 ft to S anw W lines; 4, 680 ft NW of No. 2. Prairie Oil & Gas Co., Ranger, Texas, University 4, S 39, B 30, Univ Lands sur, 330 ft to S and E lines; 5, 660 ft SW of No. 3; 6, 660 ft SE of No. 2.

Coleman County—Magnolia Petroleum Co., Dallas, Texas, J. P. Morris 18, B 76, C. M. Mann sur. Amerada Petroleum Corp., Cisco, Texas, J. W. Harris 8, S 5, J. Saunders sur, 480 ft W of No. 7; J. W. Harris 120, S 5, J. Saunders sur, 5065 to W and 1185 to S lines. A. T. Russell, Brownwood, Texas, M. Russell 1, J. Martin sur, 200 ft to N and 800 ft to W line; Smith 1, J. Martin sur, 200 ft to S and W lines. H. H. Gracey et al, Coleman, Texas, E. G. Newsom 1, B 7, D. Moses sur No. 500, 160 ft to E and 354 ft to S line.

Caldwell County—Sutton & Smith, Luling, Texas, R. W. Carter 1, G. Hinde sur, 150 ft E of center of W. line. Magnolia Petroleum Co., Dallas, Texas, W. F. Mercer 13, N. Reaville sur, 150 ft to N and E lines. M. Moore 20, J. Henry sur, 300 ft SW of No. 12; W. H. Tabor 27, N. Reaville sur, 300 ft NW of No. 4; W. Branyon 4, N. Reaville sur, 200 ft to S and W lines.

Cooke County—Oil Operators Trust, F. &

An Important Question and the Correct Answer



Let our engineers help solve your Power Problems

Gulf States Utilities Co. Western Public Service Co.

Texas Division
Beaumont

Louisiana Division
Lake Charles

THE
REX STANDING
VALVE

ITS REVERSIBLE, TWO IN ONE VALVE SCREWS IN BOTTOM OF WORKING BARREL COLLAR — REDUCES YOUR TUBING JOBS.

Manufactured in Brass or Steel

Sold by Supply Houses

REX SUPPLY COMPANY
Sour Lake, Tex.
Patented Aug. 15, 1922, No. 1425710

Emerald Oil Company

Producers of
Crude

General Offices
Winfield, Kansas

CARBON (BLACK DIAMONDS)
FOR DIAMOND CORE DRILLS
—IMPORTERS—
INDUSTRIAL DIAMONDS
—MANUFACTURERS—
DIAMOND POINTED TOOLS FOR ALL MECHANICAL PURPOSES
WRITE OR WIRE FOR CATALOGUE AND FULL PARTICULARS
THE DIAMOND DRILL CARBON CO.
58 PARK ROW, NEW YORK, N.Y. CABLE ADDRESS, CHEDOTAN, N.Y.

M. Bank Bldg., Fort Worth, Texas, B. Lube 2, B 89, 150 ft to S and E lines.

Clay County—Empire Gas & Fuel Co., Staley Bldg., Wichita Falls, Texas, L. S. Wright 1, 2632 TE&L sur, 150 ft to S and E lines. S. C. Cole, Iowa Park, Texas, R. L. Byrd 1, 2644 TE&L sur, 450 ft to N and 150 ft to E line.

Duval County—Buckner & Tyng, Houston, Texas, R. Benavides 1, S 15, B 11, M. Arispe sur, 155 ft to S and W lines; 1, B 10, 155 ft to S and W lines. Houston Oil Co., Houston, Texas, R. Benavides 3B, S 16, B 2, M. Arispe sur, 155 ft to S and E lines. Cole Petroleum Co., First Nat. Bank Bldg., Laredo, Texas, M. Arispe 32, S 15, B 2, 660 ft to N and W lines; 33, B 14, 660 ft to N and W lines.

Eastland County—Magnolia Petroleum Co., Dallas, Texas, F. E. Thomas 2, B 35, J. Sayers sur, 330 ft to N and E lines. Blaylock & Groce, 308 W. 10th St., Fort Worth, Texas, J. H. Harwell 1, S 492, SP Ry. sur, 150 ft to W and 2640 ft to S line. Amerada Petroleum Corp., Cisco, Texas, C. V. Ables 1, S 16, B 1, H&TC sur, 330 ft to S and W lines. Roxana Petroleum Corp., South Bend, Texas, G. W. Hines 1, S 16, B 5, H&TC sur, 330 ft to S and E lines. States Oil Corp., Eastland, Texas, C. E. Sumrall 5, S 6, B 4, H&TC sur, 1015 ft to N and 300 ft to E line. Moore & Garrett, Eastland, Texas, Capers Hrs. 1, S 10, B 2, H&TC sur, 165 ft to N and W lines. Cranfill & Reynolds, Cisco, Texas, J. E. Spencer 1, S 15, B 3, H&TC sur, 660 ft to N and E lines; W. Bond 1, S 46, B 2, H&TC sur, 150 ft to S and 660 ft to E lines.

Fort Bend County — Gulf Production Co., Houston, Texas, J. Wheat 14, M. Young sur, 150 ft NE of No. 1; W. Davis 39, M. Young sur, 325 ft NE of No. 27. J. S. Abercrombie Co., West Bldg., Houston, Texas, Robinson 2, B 5, H. Shropshire sur, 50 ft to S and 272 ft to E line.

Gray County—McMan Oil & Gas Co., Tulsa Co., Tulsa, Okla., P. Worley 26, S 62, B 3, Okla., O. F. Binkley 1, S 86, B 3, I&GN sur, 330 ft to N and E lines. Wilcox Oil & Gas Humble Oil & Ref. Co., Wichita Falls, Texas, T. B. Haggard 1, S 112, B 3, I&GN sur, 330 ft to S and W lines.

Gonzales County—Kercheval Porduction Co., Cotton Exchange Bldg., Fort Worth, Texas, A. S. Billings 2, G. Gwinn sur, 100 ft N of No. 1.

Glasscock County—Dixie Oil Co., San Angelo, Texas, H. R. Clay 1, S 154, B 29, W&NW sur, 200 ft to N and 150 ft to W line.

Garza County—Pandem Oil Corp., Wichita Falls, Texas, J. D. Justice 1, S 12, B 6, H&GN sur, 330 ft to S and W lines.

Hutchinson County — Gulf Production Co., Fort Worth, Texas, J. A. Whittenburg 6, S 71, B 46, H&TC sur, 330 ft to S and E lines. Joe Fronterhouse, 501 Lincoln St., Amarillo, Texas, E. B. Johnson 2, M. Whitley sur, SE corner. Prairie Oil & Gas Co., Ranger, Texas, Johnson A, 61, S 64, B 46, H&TC sur, 330 ft to N and E lines; 60, 997 ft to W and 330 ft to S line; 59, 330 ft to S and 1070 ft to E line. Marland Oil Co., Fort Worth, Texas, J. M. Sanford B1, S 82 B 46, H&TC sur, 330 ft to N and 1771 ft to E line. Phillips Petroleum Corp., Bartlesville, Okla., Johnson Bros. 3, S 70, H&TC sur, 330 ft to N and W lines. J. A. Whittenburg 7, S 81, B 46, H&TC sur, 330 ft to Nand E lines.

Howard County—Marland Oil Co., Fort Worth, Texas, O. Chalk A5, S 95, W&NW sur, 250 ft to N and 906 ft to E line; A6, 250 ft to S and 2390 ft to E line; Clay 2, S 139, B 29, W&NW sur, 400 ft E of No. 3; 3, 1120 ft to W and 200 ft to S line; H. R. Clay C1, S 154, W&NW sur, 200 ft to N and W lines. Merrick & Bristow, Box 932, Ardmore, Okla., A. J. Hooks 1, S 140, B 25, W&NW sur, 200 ft to N and E lines.

Hardin County—Ada Belle Oil Co., Batson, Texas, Fee 113, S. A. J. Knight sur, 50 ft to W and 110 ft to N line. Texas Co. 114, Sec. K. Knight sur, 50 ft to N and W lines.

Hockley County—El Capitan Oil Co., San Angelo, Texas, Ellwood 1A, S 55 B A, R. M. Thompson sur, 330 ft to S and W lines.

Harris County — Marsalis Bros., Humble, Texas, H. Harrison 1, Echols-Jas. Strange sur, 50 ft to N and 300 ft to W line. Webb Oil

Be Careful In The Selection Of Lubricants For Your Motorized Equipment

Passenger cars and trucks of different makes vary considerably in type and design.

Be sure that you understand: (1). The type of lubricating system used, which determines the method of feeding the oil. (2). The type of cooling system used, this factor having more or less effect on the operating temperatures of various parts of the motor.

The proper lubrication of motor equipment means not only the lubrication of the engine cylinders — but the complete lubrication of all of the moving parts of the motor. Much harm can result from the use of too heavy an oil in a pressure system not designed to handle it—also where the "splash" system is used, the oil must not only flow easily, but must atomize readily so as to reach certain bearings which can be lubricated only by a fine mist. Your passenger cars and your trucks are designed to give you many years of service—if they are properly lubricated.

HUMBLE OIL & REFINING CO. HUMBLE OILS HOUSTON, TEXAS

Reg. U. S. Pat. Off.

There is a Humble Oil which is specially prepared to meet every bearing need in your plant, your trucks, or in your automobile.

Humble Motor Oils are the result of years of experience in lubricating internal combustion engines. The recommendations of Humble engineers are an added factor of safety. Whether you operate one passenger car and truck, or a whole fleet of motorized equipment, it will pay you to learn more about Humble Oils.

Humble Oil & Refining Co.

Producers ~ Pipe Lines ~ Refiners ~ Marketers

BUY USED PIPE

and Save the Difference

4,800′	4-¼″	15 *lb* used casing
8,000′	5-3/16″	17 *lb* used casing
8,000′	6-⅝″	24 *lb* used casing
10,000′	8-¼″	32 *lb* used casing
3,000′	8-¼″	28 *lb* used casing
4,000′	10″	40 *lb* used casing
10,000′	2″	used tubing and rods
4	25	H. P. Used Gas Engines
2	5″	Standard Rigs
8	6″	Standard Rigs
80,000′	3″	Used line pipe
50,000′	4″	Used line pipe

Keystone Pipe & Supply Co.

607 HOLMES BLDG., FORT WORTH, TEXAS
Eastern Headquarters: Butler, Penna.
BRANCH STORES:
Wichita Falls, Holliday, Vernon, Breckenridge, Texas.

CLARENCE C. PARFET LESLIE E. MARTLEW

PARFET & MARTLEW

Specialists in Federal Tax Matters

(Oil depletion a specialty)

Enrolled to practice before the Treasury Department

OFFICES

Suite 518-20 Bob Waggoner Bldg.
WICHITA FALLS, TEXAS

Sixth Floor Amarillo Bldg.
AMARILLO, TEXAS

Shooting Your Well

The productiveness of an oil well often is in direct proportion to the skill of the shooter. Think this over when ordering that next shot.

STATIONS

TEXAS	OKLAHOMA	
Breckenridge	Cromwell	Seminole
Borger	Cleveland	Tonkawa
Colorado	Drumright	Tulsa
Cross Plains	Okmulgee	Webb City
McCamey		
Ranger		

THE EASTERN TORPEDO OF OHIO CO.

Co., Humble, Texas, D. B. Cherry 28, Jas. Strange sur, 260 ft SE of No. 27.

Jim Hogg County—Magnolia Petroleum Co., Dallas, Texas, Killam-Martinez 26B, No. 276 sur, 300 ft SW of No. 22. Garza 20, No. 291 S. C. Hendrix sur, 300 ft SE of No. 6. Killam-Martinez 25B, No. 276, 300 ft S of No. 21. American Well & Prospecting Co., Corsicana, Texas, C. Palacios 20, No. 291, B 1, 1128 ft to W and 150 ft to S line. J. L. Collins & Co., Corsicana, Texas, C. Palacios 9, S 291, B 21, 300 ft SW of No. 8.

Jones County—Phillips Petroleum Co., Bartlesville, Okla., W. M. Tessie 3, S 19, B 19, T&P sur, 628 ft S of No. 1. E. P. Campbell et al, Breckenridge, Texas, C. Herndon 1, S 6, MEP&P sur, 670 ft to W and 1320 ft to S line.

Jefferson County—Yount-Lee Oil Co., Beaumont, Texas, Fee 20, B 5, J. Douthitt sur, 61 ft to S and 513 ft to W line; 22, 289 ft to S and 663 ft to W line; 21, 764 ft to W and 200 ft to S line; Gladys 20, J. A. eVatch sur, SE cor of Blk. 12; 18, 60 ft to W and 855 ft to S line. Unity Oil Co., Beaumont, Texas, McFaddin, Weiss & Kyle, 93, P. Humphreys sur, 72 ft to NW and 600 ft to NE line. Langhorn Oil Co., Orange, Texas, Chaison 3, B 1, J. Douthitt sur, 25 ft to NW and 300 ft to NE line.

Jack County — Buttram Petroleum Corp., Tulsa, Okla., M. Cullum 2, G. T. Hobbs sur, 420 ft to E and 105 ft to S line. T. S. Williams, Strawn, Texas, J. W. Shultz 1, B 46, WCSL sur, 540 ft to N and 175 ft to W line.

Limestone County—Magnolia Petroleum Co., Dallas, Texas, W. B. David 5, P. Valera sur. C. F. Lytle, Mexia, Texas, J. Stubenrach 1, P. Varela sur, SE corner. E. P. Zoch, W. T. Waggoner Bldg., Fort Worth, Texas, A. P. Maddox 1, P. Varela sur, center.

Montague County—Continental Oil Co., Wichita Falls, Texas, N. J. Howard 20, J. Chambliss sur. J. W. Maddox 1, B 15, H. S. Arnold sur, 150 ft to N and W lines; M. H. Salmon 1A, S. Little sur, 816 ft to W and 150 ft to N line; J. W. Maddox 14A, C. W. Thompson sur, 450 ft to W and 200 ft to N line; J. W. Rowland 11B, E. Votaw sur, 376 ft W of No. 3; N. J. Howard 1, J. Chambliss sur, NE corner; J. W. Maddox A 13, C. W. Thompson sur, 512 ft E of No. 1; M. J. Howard A17, J. Chambliss sur, 349 ft E of No. 14; N. J. Howard B7, J. Chambliss sur, 434 ft E of No. 5; J. W. Maddox A15, C. W. Thompson sur, 377 ft E of No. 10. Olean Petroleum Co., Box 7, Bristow, Okla., J. Bouldin 2, C. Carcon sur. Lesh & McCall et al, Nocona, Texas, S. L. Rolls 11, J. Chambliss sur, 450 ft SW of No. 10.

Milam County—Coffield & Hale, Rockdale, Texas, S. B. Smith 1, 150 ft to N and E lines; 3, 150 ft to S and E lines. Noack Oil Co., Rockdale, Texas, Seelke Hrs. 2, T. J. Chambers sur, 300 ft SE of No. 1.

Mitchell County—J. C. Yancy, 575 W. 10th St., Fort Worth, Texas, C. E. Way 1, S 91, B 27, T&P sur, 150 ft W of center of E line. Magnolia Petroleum Co., Dallas, Texas, T. S. McKinney 1, S 30, B 29, T&S sur, 330 ft to N and W lines. California Co., Colorado, Texas, E. Morrison 1, S 42, B 28, T&P sur, 990 ft to E and 1750 ft to S line.

McCullouch County—Kentex Oil Co., Dallas, Texas, S. M. Townsend 1, S 280, H&TC sur, 330 ft to S anw W lines. Pandem Oil Co., Wichita Falls, Texas, G. R. White 1, B 817, C. Junker sur, center.

Medina County—Witherspoon Oil Co., San Antonio, Texas, C. Franklin 2, S 23, C. Labruce sur, 450 ft to E and 750 ft to S line.

Navarro County—Magnolia Petroleum Co., Dallas, Texas, R. Hardy 1B, S. F. McCandless sur, 150 ft to N and E lines; C. E. King 1B, W. J. Carnes sur, 150 ft to S and E lines; J. F. Stout 16, S. F. McCandless sur, 150 ft to N and E lines. G. C. Kent, Corsicana, Texas, R. Hardy 11, S. F. McCandless sur, 935 ft NW of No. 11.

Refugio County—Wm. F. Morgan, Travis Bldg., San Antonio, Texas, Rogers Est. 1, J. Powers sur, 200 ft to E and 450 ft to S line.

Roberts County—C. C. Wilson, Box 687, Canadian, Texas, H. Tandy 1, S 182, B 42, H&TC sur, NE cor of Sec. 182.

Shackelford County—Milham Corp., Travis Bldg., San Antonio, Texas, Moore 8, S 1564,

A NEW D•B SUCKER ROD STRING

to replace that old broken string.

D & B "Quality First" Sucker Rods long have been recognized as the highest standard of quality in design, construction, and in service. Augmenting this superior quality and strength is the D & B organization, and complete stocks for immediate shipment. No delays. No order too large for our facilities, and none too small for our best attention.

D&B PUMP and SUPPLY CO.

LOS ANGELES, CALIF. DALLAS, TEXAS.

BRANCH STORES.

TORRANCE, TAFT, COALINGA, BAKERSFIELD, SIGNAL HILL, HUNTINGTON BEACH & SANTA FE SPRINGS, CALIFORNIA

Always the Same Dependable Quality—

Diamond "H" Bit and Jar Steel—made from the highest grade acid open hearth ingots for oil well drilling tools.

HEPPENSTALL
FORGE AND KNIFE CO.
PITTSBURGH, PA.

BRANCH OFFICES:

Boston, Mass.
Bridgeport, Conn.
Jersey City, N. J.
Philadelphia, Pa.
Buffalo, N. Y.
Cleveland, Ohio
Detroit, Michigan
Chicago, Ill.
Hamilton, Ontario
Indianapolis, Ind.
St. Louis, Mo.
Milwaukee, Wis.
Los Angeles, Calif.
Fort Worth, Texas
San Francisco, Calif.
Denver, Colo.

TE&L sur, 330 ft NW of No. 3. Barney Carter, Ranger, Texas, L. C. Huskey 18A, 584 TE &L sur, 600 ft NE of No. 7A. Halmack Oil Co., American Exchange Nat. Bank Bldg., Dallas, Texas, G. E. Reynolds 2, S 11, B 11, SW corner. Cosden & Hope Oil & Gas Co., F. & M. Bank Bldg., Fort Worth, Texas, W. Y. Davis 4, S 14, B 12, T&P sur, 150 ft to N and E lines; 5, 150 ft to S and W lines; W. D. Reynolds 14, S 24, B 11, T&U sur, 150 ft to N and W lines.

Stephens County—E. P. Zoch, W. T. Waggoner Bldg., Fort Worth, Texas, H. Compton 1, S 40, B 7, T&P Ry. sur, 1120 ft to N and 150 ft to W line. B. H. Hopkins, Box 806 Ranger, Texas, W. L. Carey 1, S 21, B 6, T&P sur, 165 ft to S and 1100 ft to E line.

Sabine County—Charter Oil Co. of Texas, Hemphill, Texas, S. Pratt 1, R. Anthony, East central.

San Patricio County—Huber & Crawford, Mirando City, Texas, Maedgen 1, B 17, Huber & Crawford sur, 300 ft to NW and 2500 ft to SW.

Swisher County — Harwell Bros., Abilene, Texas, N. Wagley 1, S 2, D&D Asy. sur, 450 ft to N and W lines.

Throckmorton County — Hoffer Oil Corp., Fort Worth, Texas, J. A. Mathews 3, S 23, 2 E. T. Ry. sur, center. Gulf Production Co., Fort Worth, Texas, K. Graham 2, 985 TE&L sur, 250 ft to S and E lines.

Taylor County — Midwest Exploration Co., Amarillo, Texas, Toombe 1, S 6, No. 37, A. Thompson sur, 865 ft to N and 1028 ft to W Hurley Oil Co., Alexander Bldg., Abilene, Texas, J. Sears 2, S 34, B 18, T&P sur, 710 ft to N and 380 ft to E line. Midwest Exploration Co., Box 972, Amarillo, Texas, I. Thornton 4, S 18, B 19, T&P sur, 330 ft to N and W lines; 3, 858 ft to N and 330 ft to E line.

Upton County—Gulf Production Co., Fort Worth, J. T. McElroy 1, S 187, B F, CCSD& DGNG sur, 660 ft to S and W lines. Dixie Oil Co., San Angelo, A. S. Burleson 19, S 2,

W. ARMSTRONG PRICE, PH. D.
Geologist
1312 Neils Esperson Bldg.,
Houston, Texas
Telephone: Preston 3764

EDWIN B. HOPKINS
CONSULTING GEOLOGIST
25 Broadway
NEW YORK

PHILLIP MAVERICK
PETROLEUM GEOLOGIST
Telephone 93
Ricker & Dodson Bldg.
San Angelo, Texas

Maurice Hirsch & Ben J. Brown
ATTORNEYS AT LAW
601-2-3 Goggan Bldg.
HOUSTON, TEXAS
Specializing in Oil Law and Land Law

Write for my State of Texas oil map free. Oil leases exclusively. Reference: Mercantile Agencies.
C. W. WEBSTER
W. T. Waggoner Bldg.,
Fort Worth, Texas

TEXAS PANHANDLE
Oil Maps
Also maps on Oklahoma Panhandle and Eastern New Mexico
AMARILLO ABSTRACT CO.
Amarillo, Texas.

OIL MAPS—MID-CONTINENT FIELDS
County, State and General Maps
Township Plats — Lease Forms
GALLUP MAP & SUPPLY COMPANY
1320 Walnut St., Kansas City, Mo.

TEXAS OIL MAPS
County and District
Catalog on Application
HEYDRICK MAPPING COMPANY
Wichita Falls, Texas

ARTHUR C. BROWN
SOLICITOR OF UNITED STATES AND FOREIGN PATENTS
406-412 KENNEDY BLDG.,
Tulsa, Okla.
Mr. Ferd Krueger
in Charge
Phone 4-2319

PATENTS
Patents Obtained and Trade Marks and Copyrights Registered
428-29-30 Bankers Mortgage Bldg.
HARDWAY & CATHEY
Phone Preston 4790 Houston, Texas

DIVIDEND NOTICE
Imperial Royalties Company
Will pay monthly dividend of 1½% to Preferred Shareholders on February 28. This is Dividend No. 77, and makes a total of 136% paid to shareholders.
E. S. HORN,
H. O. BLAND,
J. E. HORN, Trustees.
336 Mayo Building, Tulsa, Okla.

PATENTS
Patents Obtained, Trade Marks, Patent Causes
JESSE R. STONE
Formerly Assistant Examiner
United States Patent Office
Andrews, Streetman, Logue & Mobley
12th fl. Union N. Bk., Houston, Texas

THOMAS D. LYONS
Attorney at Law
MAYO BUILDING
TULSA, OKLAHOMA

REGISTERED PATENT ATTORNEYS
United States and Canada
Send for blank form
EVIDENCE OF CONCEPTION
Bulletin "How to Establish Your Rights" and complete information free.
LANCASTER & ALLWINE
440 Ouray Bldg. Washington, D. C.

ORIGINAL EOTVOS TORSION BALANCES
Sold and your personnel trained, or rented by the month or by the acre.
DR. GEORGE STEINER
Cotton Exchange Building
Houston, Texas

THE FT. WORTH LABORATORIES

Field Gas Testing. Analysis of oil field brines, gas minerals and oil. Sell Thermometers, Hydrometers and Laboratory Glassware
F. B. Porter, B. S., Ch. E., Pres.
R. H. Fash, B. S., Vice-President
828¾ Monroe St. Ft. Worth, Tex.

"WANTED: Petroleum Engineer with at least five years practical experience. A man with gas lift experience preferred. State experience references and salary wanted in first letter. Address Drawer I., Bartlesville Oklahoma."

Doing the Charleston

Ever notice some of the so-called pulling machines tremble and shiver, bend in the middle and kick out at the joints for all the world as if they were doing the Shimmy or dancing the Charleston? Every wiggle, every bend and every shake seems to be telling you that you are taking a chance. Why stand the risk of ruining a good well by taking a chance and trusting to luck that nothing "busts."

Ready for the road

Balances easy

AWAY WITH THE DANCE

An IRON KING pulling machine, standing firm as the Rock of Gibraltar is the answer to all pulling problems, and is your insurance against disaster.

If your oil well supply store will not get you an IRON KING write us direct. Let us send you a catalog.

Iron King Manufacturing Co.
Bradner — Ohio

He's putting it up

All set

Nidiver sur, 330 ft to N and 3970 ft to E line. Roxana Petroleum Co., Dallas, D. Bowen 13, S 6, GC&SF sur, 330 ft to E and 2310 ft to S line; 14, 990 ft to S and E lines. M. D. Bryant & Atlantic, San Angelo, M. L. Baker 1, S 7, B R, M. S. Denton sur, 150 ft to SW and 750 ft to SE line. Prairie Oil & Gas Co., Ranger, J. F. Lane 1, No. 5, GC&SF sur, 330 ft to S and W lines; 3, 330 ft to N and W lines; 4, 330 ft to N and E lines; 4, 330 ft to N and E lines. Texas Co., Wichita Falls, R. King 23, S 11, B 13 1/3, CCSD&RGNG sur, 660 ft N of No. 22. Dixie Oil Co., Inc., McCamey, A. S. Burleson 17, S 2, Nidiver sur, 660 ft E of No. 16; 18, 330 ft to N and 4290 ft to E line; 19, 330 ft to N and 3630 ft to E line; 20, 330 ft to N and 6270 ft to E line. Texas Pacific Coal & Oil Co., Ranger, F. Lane 2, S 5, GC&SF sur, 1650 ft to S and 330 ft to W line; 3, 990 ft to S and 1650 ft to W line; 4, 1650 ft to S and 990 ft to W line.

Wichita County — Pioneer Ref. Co., Staley Bldg., Wichita Falls, J. Cole 1, B 10, PPCSL sur, 150 ft to N and W lines. Bridwell & Heydrick Oil Co., Wichita Falls, J. P. Griffin 2, B 6, W. H. Spillers sur, 150 ft to S and 1350 ft to W line. Waggoner Bros. 3, H. George sur, 300 ft W of No. 2. J. A. Hood, 2214 7th St., Wichita Falls, F. F. Gaston 1, S 328 J. Walker sur, 290 ft to N and 150 ft to W line. J. C. Jennings et al, Staley Bldg., Wichita Falls, Fee 2, S 12 HT&B sur, 300 ft E of No. 1. M. L. Davis, Box 785, Wichita Falls, T. J. Cole 1, B 2, PPCSL sur, 150 ft to N and E lines. Continental Oil Co., Wichita Falls, S. B. Burnett E13, S 2, T&NO Ry sur, 150 ft to N and W lines. Gulf Production Co., Fort Worth, G. Jennings 20, S 11, HT&B sur, 410 ft N of No. 19. Petroleum Prod. Co., Wichita Falls, M. A. Love 4, B 11, W. S. Kennard sur, 250 ft S of No. 3. Fain-McGaha Oil Corp., Waggoner Bldg., Wichita Falls, W. P. Ferguson 2, William Spiller sur, 500 ft W of No. 1. C. P. Sheldon, Electra, J. M. Honaker 1, J. Cole sur, SW corner. H. J. Fisher, Newport, N. Y., Parker-Williams 15, B 5, Cowherd sur, 300 ft E of No. 9. T. F. Hunter, Wichita Falls, J. & J. Waggoner 26, S 1, GC&SF sur, 150 ft to W and 165 ft to S line.

Wilbarger County—Humble Oil & Ref. Co., Wichita Falls, W. T. Waggoner 19, S 46, B 4, M&TC sur. Phillips Petroleum Co., Bartlesville, Okla., W. T. Waggoner CCóa, S 42, B 9, H&TC sur, 20 ft W of No. 6. Humble Oil & Ref. Co., Wichita Falls, W. T. Waggoner 19, S 46, B 4, H&TC sur. Roxana Petroleum Corp., South Bend, T. J. Milner 1, S 30, B 9, H&TC sur, 150 ft to S and W lines. Humble Oil & Ref. Co., Wichita Falls, W. T. Waggoner 20, S 40, B 4, H&TC sur, 50 ft S of No. 8; 14, S 47, 50 ft NW of No. 14. Fain-McGaha Oil Corp., Wichita Falls, F. Flubman 6, B 9, H&TC sur, 150 ft to N and W lines. Gulf Production Co., Fort Worth, Milner 1, S 30, B 9, H&TC sur, 150 ft to S and W lines.

Webb County—E. St. Albans, Laredo, Pure Bros. 1, Albercas sur, 450 ft to N and 150 ft to W line. R. F. Duggan, R. E. Lee Hotel, Laredo, E. Garcia 1, S 608, GC&SF sur, 150 ft to S and E lines. Houston Oil Co., Houston, R. O. Barnsley A1, B 14, No. 268 sur, 250 ft N of center of S line.

Wood County—E. H. Everett, Newark, Ohio, Consumers Lignite Co. 1, Crawford sur, 735 ft to N and 300 ft to E line.

Wheeler County — Magnolia Petroleum Co., Dallas, C. A. Worley 1, S 39, B 24, H&GN sur, 330 ft to N and E lines. C. E. Johnson 3, S 40, B 24, H&GN sur, 660 ft W of No. 1; 4, 660 ft S of No. 1. Mid-Kansas Oil & Gas Co., Tulsa, C. Phillips 1, S 41, B 24, H&TC sur, 330 ft to S and W lines.

Wharton County—Weed-Gayle Oil Co., Beaumont, Banker, Jr., 5, S. F. Austin sur, 50 ft to SW and 430 ft to NW line. H. Keller 4, S. F. Austin sur, 225 ft to NE and 455 ft to SE line. G. W. Lavelock 6, S. F. Austin sur, 360 ft to NW and 50 ft to SW line. C. & J. Feltz 9, S. F. Austin sur, 385 ft to SW and 570 ft to SE line. Gulf Production Co., Houston, E. M. Chase 2, S. F. Austin sur, 5 ft to N and E lines.

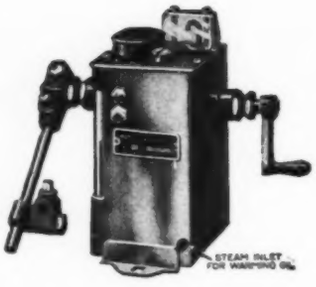
Winkler County — Skelly Oil Co., Tulsa, Okla., M. Lehman 1, S 21, B 75, WCSL sur, center. Humble Oil & Ref. Co., Wichita Falls, D. Hendrick 1, S 36, B 27, School Lands sur, 1320 ft to S and E lines.

Young County — Shonquist Drilling Corp., Box 226, Breckenridge, E. C. Stovall 1, James Tobin sur, 150 ft to S and W lines. Magnolia Petroleum Co., Dallas, I. C. Little 16, I. Holman sur, 300 ft S of No. 15.

Zapata County — O. W. Killam, Laredo, Lopez 1, S 69, B 5, 620 ft to N and 150 ft to E line. Charco Redondo Oil Co., Wichita Falls, Garcia Heirs 63, No. 3 Redondo sur, 200 ft S of No. 62; 62, 200 ft S of No. 59, 200 ft S of No. 51; 58, 200 ft S of No. 47.

The Lubricator You Need for Oil Field Service

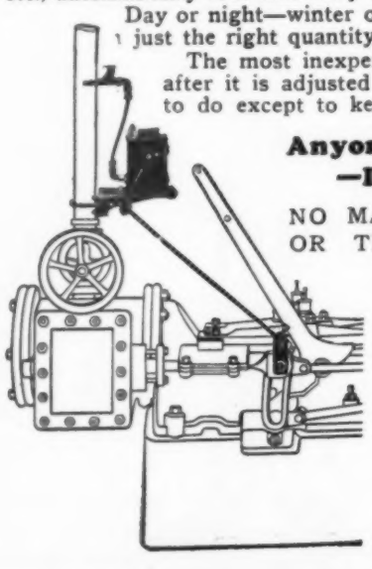
Requires no attention. Doesn't need to be turned on or shut off. Automatically starts, speeds up, and slows down, just as the engine does, and stops feeding the instant the engine is shut down.



The "Manzel" Force Feed Lubricator

Lubricates drilling engines, mudhogs, air and gas compressors, pumps, etc., automatically and efficiently and reduces oil bills 30 to 60 per cent. Day or night—winter or summer, it supplies oil regularly and in just the right quantity.

The most inexperienced helper can take care of it, for after it is adjusted to suit your engine, there is nothing to do except to keep the reservoir supplied with oil.



Anyone Can Install It—In the Field —In Less Than Half an Hour

NO MACHINE WORK, PIPE FITTING OR THREAD CUTTING NECESSARY

We furnish (when desired) special brackets and complete fittings for installing on Oil Well, Acme, Ajax, Warren or other drilling engines, either single or double type. In less than thirty minutes after you receive the "Manzel" Lubricator, you can have it installed on your engine and your lubrication troubles will be over.

Sold by All Leading Supply Dealers

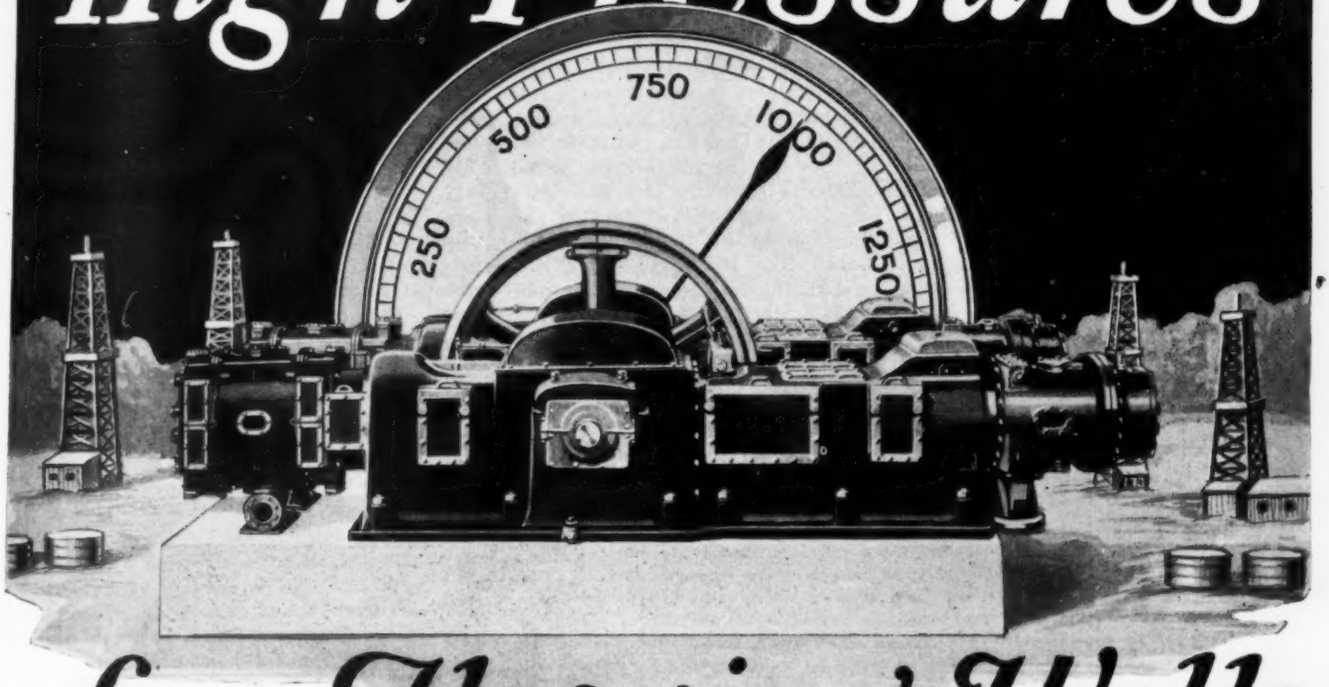
MANZEL BROTHERS COMPANY

332-334 Babcock Street Buffalo, N. Y.

New Mexico Well Will Pump 200 Barrels

Santa Fe, N. M.—The discovery of oil on the Hospah dome in McKinley County by the Midwest Refining Company has proven to be of even greater importance than at first reported. The well was first reported as not commercial but tests proved to the contrary. Oil rose nearly to the top of the hole but the well did not flow. Efforts were made to reduce the column of oil by bailing but these were unsuccessful. The well will probably make 200 barrels daily. The crude is the lowest in gravity of any yet found in the immediate region. A heavy oil is needed, however, to be used with the extremely light oil found in other parts of the State. The development program for the year has not been announced by officials of the company.

High Pressures



for Flowing Wells

BESSEMER developed and perfected the high pressure compressor for flowing wells—and it's only Bessemers that have been thoroughly time tried and field tested on high pressure work. The first direct driven compressor for flowing oil by compressed gas or air in the Eldorado, Ark. field was a Bessemer, and today many of these high pressure Bessemers are on this work. Now that the Seminole, Okla. field has found it necessary to get the oil to the surface quickly and economically they too are turning to high pressure Bessemers as the proven standard for flowing wells at high pressures.

The high pressure Bessemer Type Ten Compressor is designed and built *specifically* for flowing wells at high pressures. Special cylinders for handling high pressures are mounted on, and direct connected to, a 165 H. P. twin Type Ten bed plate. The entire unit is constructed throughout with a wide margin of excess strength to insure a large factor of safety even at the maximum pressure capacity.

A high pressure Bessemer can be used either on individual wells or in a central plant which operates a number of wells, and however used, one of these Bessemer units will give a higher pressure and cost less on the basis of pressure delivered, than any other compressor, or series of compressors, available.

Play safe on your high pressure requirements! Insist on the compressor that has been *proved* by performance on high pressure work—

THE BESSEMER GAS ENGINE COMPANY
62 York Street ∴ ∴ Grove City, Pa.

Designed and built *specifically* for high pressure work of flowing wells.

Easily handles the high pressure necessary to start flow of well.

Quick delivery can now be assured because of increased production.

One high pressure Bessemer can be used either on an individual well or in a central plant to handle a number of wells, depending on conditions.

Sturdy, economical, highly efficient, and dependable—all proved by performance in the field on high pressure work.

That's

BESSEMER

Venezuela Becomes Fourth Largest Oil Producing Country

(Continued from page 56)

tended their field at El Mene to the south and west and are testing two other structures.

The Omnium Oil Development Company, Ltd. is drilling with a Sullivan Diamond drill in the northern part of the District of Uraneta, State of Zulia, at a depth of 2500 feet.

The Standard of California is drilling on a New England Company lease at a depth of 3713 feet in Central Perija as well as structure drilling in that neighborhood. It is also working on a well to the south of the Mene Grande field, present depth 5121 feet.

The Colon Development Company, Ltd. is slowing developing the Tarra and Oro fields and is drilling one well (last reported depth 3200 feet) at Los Manuelos, which if successful will mean a third field in the District of Colon.

The Caribbean Petroleum Company extended its Mene Grande field to the south and East and made a very important discovery. Twenty-eight gravity oil was found in the shale which underlies the first oil bearing sands. This shale had hitherto been considered barren. Other wells drilled to the same horizon prove the continuity of this sand. This find is practically equivalent to the discovery of a new oil field.

The Sun Company has been continuing its operations on three wells in the southeastern part of the Lake Maracaibo Basin.

The New England Company abandoned its fourth well to the southeast of the Mene Grande field at a depth of 2385 feet.

Besides drilling the discovery wells of two new fields at Lagunillas and Benitez the Gulf has been drilling the following wildcats:

A well on a Creole concession in the Lake about 10 miles north of Maracaibo, present depth 3740 feet.

One in Northern Perija abandoned at a depth of 2423 feet.

A well drilling in the eastern part of the district of Miranda.

The Gulf was also drilling many structure testing shallow wells in the district of Mara.

Abandoned Regions

The two regions that seem to have been definitely abandoned during the year art Southern Perija, State of Zulia, and the Onia field, south of Lake Maracaibo in the State of Merida. The Standard (New Jersey) abandoned all its camps and removed its equipment from southern Perija and the Beacon-Sun is doing the same at Onia.

Eastern Venezuela

The General Asphalt Company is shipping about 60,000 barrels of very heavy oil from its five "asphalt" wells in Eastern Venezuela near the Bermudez Asphalt Lake. This oil is under 10 Baume in gravity and is almost a liquid asphalt, but is very valuable as a flux for other asphalts.

The Standard of New Jersey has a little heavy oil from its wells near Quiriquire in Monagas and are drilling one well near there and another in the district of Benitez in the State of Sucre. During the year they have abandoned five wells in Monagas and one in Sucre.

The Gulf, Atlantic, Pantepec, Maxudian, Union, Standard of California and Lago have had many parties of geologists and engineers working on their concessions in Monagas, Anzoategui and Guarico.

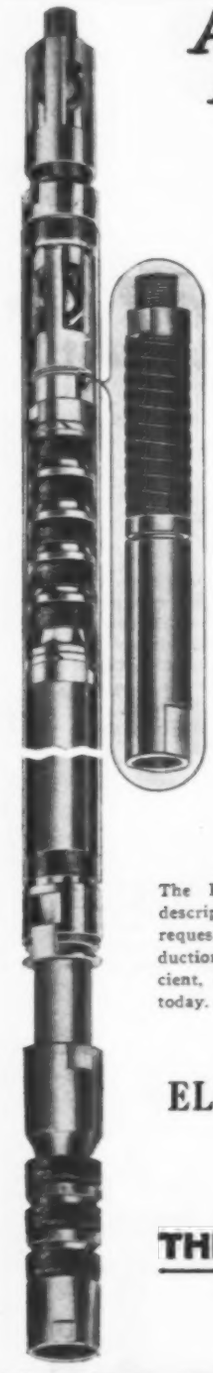
Southwestern Venezuela

The Sinclair and Amerada acquired during the year extensive holdings in the State of Zamora and had parties working in that territory. Sinclair has acquired large concessions also in Apure.

West Indies

Drilling was suspended during last year in the island of Santo Domingo and Barbadoes.

In the island of Trinidad two new fields are indicated by successful wells, one drilled by the British Controlled Oilfields, Ltd. at Palo Seco and another by the Leaseholds at Guayguayare. An American company, the Trinidad Oil Fields, acquired large acreage in the Island during the year and is drilling five wells, one of which is reported as a producer.



AN ADDED PROTECTION
AGAINST CUP REPLACEMENT

AN additional improvement to the already efficient Ellis Traveling Barrel is an auxiliary valve body attachment. This auxiliary valve body gives an added protection to the cups— keeping sand away from the regular valve body, thus greatly reducing cup wear. This attachment is highly recommended on any size Ellis Traveling Barrel, operating in wells having aggravated sand conditions.

AN AUXILIARY VALVE BODY

This auxiliary valve body is installed between the inside seat frame and the regular valve body. Being located just below the standing valve the packing catches any sand that otherwise would reach the cups. A spring in the lower tubular section keeps it always tight and fully compressed.

The Ellis PATENTED
TRAVELING BARREL

Long usage has proven that the Ellis Traveling Barrel increases production, lowers lifting costs and eliminates basic sediment. In use throughout the various oil fields, and adopted as standard by many of the larger operators.

CIRCULAR TELLS ALL

The Ellis Traveling Barrel is fully explained in a descriptive circular which will be sent to you upon request. Tells why this barrel is an aid to oil production—and explains why its operation is more efficient, economical and dependable. Write for your copy today.

MANUFACTURED BY
ELLIS MANUFACTURING CO., KANSAS CITY, KANSAS

DISTRIBUTED BY
DISTRIBUTED BY
THE NATIONAL SUPPLY COMPANIES
NSCO

Three Winners Distributed by

2408 McKinney Avenue **HARRY B. SHINE** Houston Texas

Also Agent for—Surber & Buchannan Float Valve for Drill Pipe—Lightning Jacks.

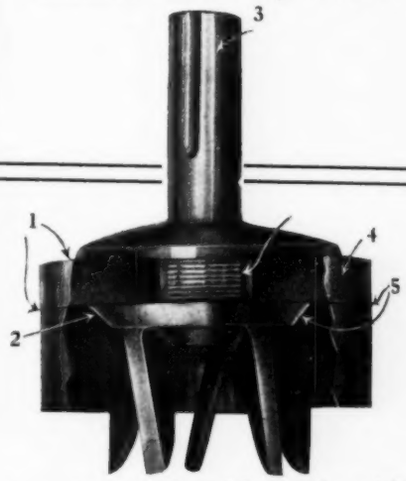
Phipps Core Bit

Actual facts—the whole truth—that's what you want and it's what you get when you have a perfect core. With Phipps Core Bit you obtain 100 per cent accurate cores, giving you 100 per cent information about every formation cored. Simple in operation, yet you're guaranteed SATISFACTION.

Foster & Smith WIRE LINE CONTROL —Money Saved —Time Saved

The Foster & Smith Wire Line Control holds a strong back pressure against the casing line, preventing gaps which cut in the line and eliminate abuse in deep drilling. There's no kinking, crawling or jams which means loss of time. Yes, it does SAVE you money!

Hamer Economy Valve



1. Fluid lays on bare rubber, pressing rubber against steel seat, which makes double seat valve.
2. Ground Seat carries weight of fluid on valve.
3. Steel Stem.
4. Soft Rubber.
5. Double seat prevents leaks under any conditions.

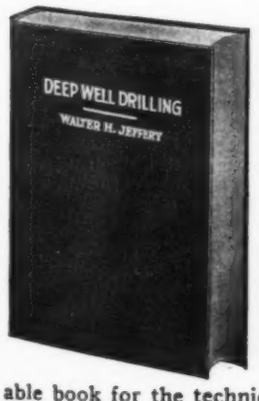
Being efficient, durable and economic the Hamer Economy Valve is being used with great success in Coastal Oil Fields. It will outlast from 6 to 12 old type valves.

Deep Well Drilling

Second Revised Edition

Just Off the Press

By Walter H. Jeffery



An up-to-date handbook on well drilling by the methods most generally used: cable, or standard, rotary, combination cable and rotary, and diamond drilling. Includes chapters on Geology, Use of Mud Fluid, Casing Methods, Use of Packers, Cementing, Electrical Drilling and Pumping, Shooting, Completing the Well by Modern Methods, Costs of Drilling, Strength of Materials, Etc. A valuable book for the technical school, for the student and for the driller and operator.

648 pages, 314 illustrations and diagrams. Postpaid, $6.00

—Lest you forget, send check today to—

THE GULF PUBLISHING COMPANY

P. O. BOX 1307 HOUSTON, TEXAS

H. H. MESSIMER

Tank Gauging Engineer

Machine Made Tank Tables

Absolute Accuracy

P. O. Box 257 113 Mid-Co Bldg.

Phone 2-4909—Tulsa, Okla.

Dependable Power for Every Purpose

CONTINENTAL MOTORS — Powerful as the Nation — AMERICA'S STANDARD

STAMINA FOR DAILY OPERATION

Seven, eight, nine hours a day, and far into the night, comes the incessant need for dependable power.

Plant construction and operation, road building, mining, are a few of the hundreds of uses which call for stamina in the power plant to meet the severe demands of these industries.

Wherever industry functions and gasoline power is employed, Red Seal Continental Motors are doing full duty in furnishing dependable, economical power. And behind each Continental Motor are 26 years of motor building experience and quality workmanship —a combination which assures the user the utmost satisfaction in his power plant.

CONTINENTAL MOTORS CORPORATION

Offices: Detroit, Mich., U. S. A.
Factories: Detroit and Muskegon

The Largest Exclusive Motor Manufacturer in the World

Specify Continental

Continental Motors

Say you saw it in The OIL WEEKLY